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Sandoval/Sandoval Zinc
Superfund/Teh Report

**Site Activities Report
Sandoval Zinc Site
Limited Environmental Cleanup**

**REACT Project No. 6536.04
April, 1999**



Prepared for:
Illinois Environmental Protection Agency
1001 North Grand Avenue East
Springfield, IL 62702

prepared by:
REACT Environmental Engineers
1733 South Vandeventer
St. Louis, MO 63110

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environmental engineering • remediation services • asbestos services • training services • emergency response


**REPORT OF QUALITY CONTROL AND ASSURANCE PLANS
AND LIMITS OF LIABILITY**

Project Title: Site Activities Report
Sandoval Zinc Site
Limited Environmental Cleanup

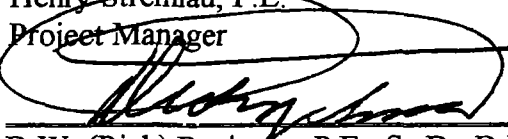
Project Location: Former Sandoval Zinc Smelter
Sandoval, Illinois

Project Number: 6536.04

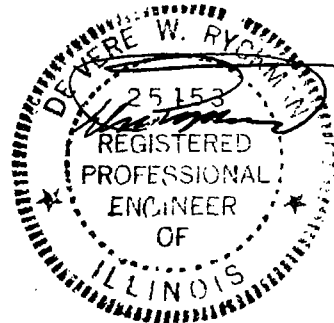
As part of DWRA/REACT's internal QA/QC practices and procedures, this document has been reviewed and approved by the following:

 5/17/99

Henry Stremmlau, P.E.
Project Manager

 5/18/99

D.W. (Rick) Ryckman, P.E., Sc.D., D.E.E.
Project Principal



LIMITATIONS OF LIABILITY. Our liability, with respect to our findings and conclusions, is limited to the scope of work. We assume no liability under this report except in the case of our gross negligence, willful malfeasance or willful nonfeasance. We make no representations as to areas not sampled, techniques used and samples not tested.



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EXECUTIVE SUMMARY

This report summarizes the limited remediation of the Sandoval Zinc Site by REACT Environmental Engineers as authorized by the Illinois Environmental Protection Agency. Site activities included characterization and disposal of various wastes collected within the buildings on site, cleaning and demolition of two above ground petroleum storage tanks, clean up of potential fuel oil contamination, proper abandonment and sealing of monitoring wells, repair or replacement of site security fencing and pressure washing, dismantling and disposal of site buildings.

I INTRODUCTION

Sandoval Zinc Company, a former Illinois corporation, located off of U.S. Route 51, southeast of Sandoval, on Smelter Road, in Marion County, Illinois, operated as a secondary zinc smelting operation from at least 1940. Sandoval Zinc Company continued to operate the site until it was closed and abandoned in 1985. Compounds fed into the kilns were pure zinc, zinc oxide, zinc chloride, possibly aluminum chloride, and other trace metals. The Sandoval Zinc Company accepted materials containing hazardous substances, such as those at the Site, from third parties as a regular part of its business.

REACT was contracted by the Illinois Environmental Protection Agency to conduct a limited remediation of the Sandoval Zinc Site. Site work consisted of the following:

- Repair and replacement of fencing surrounding the site
- A site inventory of the waste materials to be removed from the site including all readily quantifiable volumes of materials in drums or other containers and in spills on the ground
- Proper abandonment and sealing of monitoring wells
- Removal and containerization of hazardous substances inside the buildings including zinc oxide waste and fuel oil contaminated soils
- Removal and containerization of miscellaneous non-hazardous wastes including plastic jugs, construction type debris, etc.
- Cleaning, demolition, and disposal of two above ground fuel oil storage tanks.
- Pressure washing, demolition and disposal of site buildings.
- Disposal and transport of site materials.

The total cost of these activities was \$387,000.



II DESCRIPTION OF SITE ACTIVITIES

Site activities are summarized below. Descriptions of tasks correlate to the Task Numbers used for budget purposes.

Task 200: Mobilization/Site Preparation/Demobilization

Temporary Facilities: Temporary facilities were established at the entrance to the site. The job site trailer was set up with telephone and electrical hookups. The job site trailer was used for project meetings, break area and project office. A portable toilet was also present at the site. Water for washing and decontamination was procured from a hydrant approximately 1/4 mile from the trailer. Drinking water was brought to the site daily in coolers with disposable cups.

An equipment trailer was located in the clean zone adjacent to the office trailer. This trailer was used for storing equipment and supplies and donning personal protective equipment.

Decontamination Facilities: The corridor between the clean zone and the work zone was designated as the decontamination zone. This area was used for decontamination of personnel and equipment. Wastewater collected from decontamination activities was added to product waste piles as a dust control measure. The entrance to the decontamination zone from the clean zone was equipped with a moveable barrier and warning signs.

Equipment and Waste Staging: Areas within the site were designated for equipment and waste storage. The contaminated soil staging area was designated as the west side of Building 6 as shown in Figure 1. Scrap metal was decontaminated and staged to the west of Building 6. Heavy equipment was staged either in the buildings where work was active or in the work zone adjacent to the decontamination zone. Portable equipment such as the pressure washer and the water pump were decontaminated daily and stored in the equipment trailer. Equipment used on site included:

- 4000 psi cold water pressure washer
- Rubber-tracked skid steer loader
- Backhoe loader
- Trackhoe excavator with hydraulic shear attachment
- Truck mounted auger rig
- Miscellaneous light trucks for site support needs
- Miscellaneous roll off waste containers
- Roll off transporter vehicles
- End dump tractor trailers
- Tandem dump truck
- Manlift
- Two inch diameter trash pump

Equipment arriving at the job site was inspected prior to use.

Demobilization: All equipment and vehicles leaving the work area were decontaminated prior to leaving the site. Rental equipment was inspected and included a certificate of decontamination. Upon completion of site activities, the office trailer and equipment trailers were removed from the site.

Task 400: Fence Repair and Replacement

Much of the site security fencing had been knocked down or destroyed. Therefore, a fencing subcontractor, Jarnigan Fencing, was selected to repair and/or replace damaged sections.

Wherever possible, existing fencing was repaired to original placement. Replacement fencing consisted of six foot chain link. Fence posts were buried three feet and set in concrete.

Task 500: Waste Inventory and Site Characterization

Various waste materials present at the site were sampled to determine quantities and characteristics with the ultimate goal of disposing of the materials in the most cost effective and environmentally sound manner available.

The first task required to complete the site inventory is to organize the waste into unique categories for characterization. The bulk materials were investigated and divided into four categories.

- #5 Fuel Oil Impacted Solids
- Zinc Oxide and Other Zinc-containing Bulk Material
- Plastic Containers
- Metal

Containerized materials were also noted. The containerized materials were identified and numbered.

- Drum #1
- Drum #2
- Drum #3
- Drum #4
- Drum #5

A physical description and quantities for each of the waste streams listed above were documented. The metal waste was considered to be readily and economically decontaminated and recycled as scrap metal. All other waste streams were representatively sampled and underwent compatibility testing. The minimum testing consisted of the following:

- Ignitability (flashpoint)



- Classification as oxidizing or reducing agent
- Reactivity
- pH
- Concentration of total and reactive cyanide
- Solubility in water

Other laboratory tests were conducted on some of the waste streams as needed to satisfy disposal requirements. The majority of the sampling documentation is included in the August, 1998 Site Inventory Report.

The results for Fuel Oil 2 exceed the limits for the Underlying Hazardous Constituents list for land disposal (40 CFR 268.48), effective August 23, 1998 for both fluorene and phenanthrene. Therefore, additional grid sampling was proposed by REACT to further categorize the waste material. The product waste pile was divided into twelve 12' x 12' grids as shown in Figure 2 and representative samples were collected for each area. The results for nine areas indicated fluorene and phenanthrene below the regulatory limit of 3.4 ppm and 5.6 ppm, respectively. These are grid areas 1A, 1B, 2A, 2C, 3A, 3B, 4A, 4B and 4C.

Three grid areas were below the regulatory limit for fluorene, but exceeded the phenanthrene limit. These were Sample #1C (26.0 ppm), Sample #2B (12.0 ppm) and Sample #3C (26.0 ppm). Analytical results and chain-of custody are presented as Appendix B. The waste material from these three grids and from the previously sampled area (Fuel Oil 2) was required to undergo chemical oxidation treatment before landfilling.

Task 600: Abandon/Seal Monitoring Wells

Nineteen monitoring wells around the site were abandoned and sealed on July 23, 1998. REACT contracted with Roberts Environmental Drilling, an Illinois licensed well driller, to mobilize a truck mounted auger rig to the site. As much of the well material as possible (minimum of 3 feet) was pulled with the use of the auger rig. The holes were then grouted to the surface using bentonite and capped with native soil. The depth of the plugs ranged from 4 ft.-0 in. to 69 ft.-8 in. All wells abandoned were two inch PVC. The Illinois EPA Project Manager specified the wells requiring closure. Functional wells were not sealed. The location of the abandoned wells is shown in Figure 3.

Task 700: Collection and Containerization of Zinc Oxide Material

Zinc oxide material was collected from inside the buildings and stockpiled in a common loadout area (east end of Building 6). The material was first wetted for dust control, then transported to the loadout area using the rubber-tracked skid steer loader. Shovels, scrapers, squeegees and brooms were used in corners and other areas inaccessible to the loader. Collected wastewater from dust control and washing activities was added to the material stockpiles.



Initially, respirators and disposable coveralls were worn during this task. Subsequent area particulate and airborne lead monitoring indicated that respiratory protection was not required for this task, but respirators were often used, especially when disturbing large piles of zinc oxide material.

Zinc oxide material was collected and stockpiled in the loadout area. The stockpiles were periodically wetted for dust control.

Task 800: Collection and Containerization of Fuel Oil Contaminated Material

Fuel oil contaminated material was previously collected and stockpiled in the east end of Building 6. The stockpiles were wetted and consolidated by REACT in preparation for waste disposal. Additional fuel oil contaminated material was collected in conjunction with the demolition and disposal of the above ground storage tanks (see Task 1000). This material was wetted, excavated and transported to the loadout area stockpiles. Five drums of fuel oil contaminated material from the previous cleanup were added to the stockpile of fuel oil contaminated material.

Worker protection and operating practices were similar as those used for the zinc oxide material. The fuel oil contaminated material was kept separate from the non-fuel oil contaminated material. The stockpiles were periodically wetted for dust control.

Task 900: Removal and Containerization of Miscellaneous Non-hazardous Material

Plastic Containers: Approximately 50 cubic yards of plastic containers were collected from Building 5, placed into rolloff dumpsters and compressed using the skid loader and front end loader. The material had been determined to be non-hazardous as part of the site characterization, so decontamination was not required. The material was loaded into two 20-yard dumpsters and transported to a sanitary landfill.

Metal: Scrap metal found within and adjacent to the buildings was collected and taken to the scrap metal collection pile east of Building 6. The metal was then decontaminated using the pressure washer. Clean metal was accepted by Foster Salvage for recycling.

Wood: Scrap wood from within and immediately adjacent to the buildings was collected and taken to a staging area west of Building 5. The wood was neatly stacked for future disposition.

Trash: Trash from within the buildings was collected in plastic bags for disposal as general refuse. Care was taken to separate trash from zinc oxide material and other hazardous waste.



Task 1000: Clean/Demolish/Dispose Above Ground Storage Tanks

Two above ground storage tanks were present at the site south of Building 5. The tanks were found to be empty with the exception of a small volume of sludge.

First, the tanks were cut open using a trackhoe with a hydraulic shear attachment. Once the inside of the tanks were accessible, the sludge was removed and containerized in steel drums. The insides of the tanks were cleaned using the pressure washer and detergent. Washwater was collected and placed on the stockpile of fuel oil contaminated material. The sludge was later incorporated into the fuel oil contaminated stockpiles for waste stream consolidation purposes.

Approximately 35 cubic yards of fuel oil contaminated soil was excavated and added to the material stockpile. The steel tanks were cut up into manageable pieces, decontaminated and accepted by Foster Salvage for recycling.

Task 1100: Waste/Recycling Transportation and Disposal

On the basis of representative sampling of materials (see Task 500), the hazardous waste on site was divided into three categories as described below.

1) Zinc oxide material collected from the interior of the site buildings: This is the material not related to the spilled fuel. This waste stream was considered hazardous due to TCLP lead levels in excess of 5 ppm. This material was sent to Zinc Corporation of America, 300 Frankfort Road, Monaca, PA 15061. The material was not considered to be hazardous waste, because it was being recycled. Four truckloads of this material were sent out on August 7, September 30, November 4 and December 2, 1998. The total amount was approximately 100 tons. The hauler was R & J Trucking, 8063 Southern Blvd., Youngstown, OH 44513. Trucking tickets and recycling agreement are included as Appendix D.

2) Zinc oxide material impacted by fuel oil which met PNA requirements for land disposal: This material was considered hazardous due to Lead TCLP in excess of 5 ppm (Hazardous Waste D008). The levels of phenanthrene and fluorene were below the limits for land disposal. This waste stream was sent to Peoria Disposal Company #1, 4349 Southport Road, Peoria, IL 61615. A total of nine truckloads were sent out on December 4, December 7 and December 8, 1998. The total amount of waste was approximately 225 tons of hazardous waste. The hauler was Midwest Sanitary Service, 333 N. Old St. Louis Road, Wood River, IL 62095. Hazardous waste manifests have been included as Appendix E.

3) Zinc oxide material impacted by fuel oil which failed to meet PNA requirements for land disposal: This material was considered hazardous due to Lead TCLP in excess of 5 ppm (Hazardous Waste D008). In addition, the levels of phenanthrene and/or fluorene exceeded the limits for land disposal. Therefore, this material was required to undergo chemical oxidation treatment prior to land filling. The hazardous waste was shipped to Michigan Disposal Waste



Treatment Plant, 49350 N I-94 Service drive, Belleville, MI 48111. A total of four truckloads were sent out on December 15 and December 17, 1998. The total amount of waste was approximately 99 tons. The hauler was Midwest Sanitary Service, 333 N. Old St. Louis Road, Wood River, IL 62095. Hazardous waste manifests have been included as Appendix F.

Dust control and PPE were used when loading trucks. Trucks hauling hazardous waste were lined with six-mil plastic and tarped to prevent contamination during transport. The trucks including the tires were decontaminated prior to leaving site.

Task 1300: Decontaminate/Demolish Site Buildings

The floors, walls and ceilings of the site buildings were pressure washed to decontaminate the buildings for demolition. To the extent possible solids and washwater from cleaning activities were collected and added to the hazardous waste stockpiles. Water usage was minimized and berms used when possible to retain washwater. A manlift was used by the pressure wash crew for reaching upper walls and ceilings. The skid loader was used to collect mixtures of solids and washwater.

When the building decontamination was complete, the Foster Salvage demolition crew dismantled the buildings. The predominant building material was metal (sheet metal and steel beams) which was collected by Foster Salvage for recycling. Other building materials such as wood and concrete were neatly stockpiled for future disposition.

The block building was demolished by REACT personnel. Some of the concrete blocks were used for filling in the pits in Building 5. The zinc oxide material was first removed from the pits and added to the stockpiles.

In conjunction with the demolition activities, four electrical transformers were decommissioned by Illinois Power. Associated power poles were also removed from the site by the power company.



III WEEKLY SITE ACTIVITY SUMMARY

Wednesday, May 27, 1998 - Friday, May 29, 1998

1. Mobilization / Site Preparation
2. Site Inspection
3. Waste Characterization

Thursday, June 4, 1998 - Friday, June 5, 1998

1. Mobilization / Site Preparation
2. Site Inspection

Monday, June 8, 1998 - Saturday, June 12, 1998

1. Mobilization / Site Preparation
2. Access Road Preparation
3. Cut and Clean Tanks / Collect Fuel Oil Contaminated Soil
4. Locate Monitoring Wells
5. Install Temporary Fencing
6. Waste Characterization

Monday, June 15, 1998 - Friday, June 19, 1998

1. Access Road Preparation
2. Cut and Clean Tanks / Collect Fuel Oil Contaminated Soil
3. Locate Monitoring Wells
4. Cut Metal in Buildings
5. Collect and Stockpile Zinc Oxide Material

Monday, June 22, 1998 - Friday, June 26, 1998

1. Access Road Preparation
2. Cut and Clean Tanks / Collect Fuel Oil Contaminated Soil
3. Collect and Decontaminate Miscellaneous Scrap Metal
4. Collect and Stockpile Zinc Oxide Material



Monday, June 29, 1998 - Thursday, July 2, 1998

1. Decontaminate and Dispose of Plastic Containers
2. Cut and Clean Tanks / Collect Fuel Oil Contaminated Soil
3. Collect and Decontaminate Miscellaneous Scrap Metal
4. Collect and Stockpile Zinc Oxide Material

Monday, July 6, 1998 - Friday, July 10, 1998

1. Collect and Decontaminate Miscellaneous Scrap Metal
2. Collect and Stockpile Zinc Oxide Material

Wednesday, July 22, 1998 - Friday, July 24, 1998

1. Access Road Preparation
2. Monitoring Well Closure
3. Collect and Stockpile Zinc Oxide Material

Monday, August 3, 1998 - Friday, August 7, 1998

1. Repair and Install Fencing
2. Collect and Stockpile Zinc Oxide Material

Monday, August 31, 1998 - Friday, September 4, 1998

1. Decontaminate Buildings for Demolition

Tuesday, September 8, 1998 - Friday, September 11, 1998

1. Decontaminate Buildings for Demolition
2. Demolish Buildings / Collect Metal for Recycling

Monday, September 14, 1998 - Friday, September 18, 1998

1. Decontaminate Buildings for Demolition
2. Demolish Buildings / Collect Metal for Recycling

Monday, September 21, 1998 - Friday, September 25, 1998

1. Decontaminate Buildings for Demolition
2. Demolish Buildings / Collect Metal for Recycling

Monday, September 28, 1998 - Friday, October 2, 1998

1. Decontaminate Buildings for Demolition
2. Demolish Buildings / Collect Metal for Recycling
3. Load Out Zinc Oxide Waste

Monday, October 5, 1998 - Saturday, October 10, 1998

1. Decontaminate Buildings for Demolition
2. Demolish Buildings / Collect Metal for Recycling
3. Collect and Decontaminate Miscellaneous Scrap Metal

Monday, October 12, 1998 - Friday, October 16, 1998

1. Decontaminate Buildings for Demolition
2. Demolish Buildings / Collect Metal for Recycling

Monday, October 19, 1998 - Friday, October 23, 1998

1. Decontaminate Buildings for Demolition
2. Demolish Buildings / Collect Metal for Recycling
3. Collect and Stockpile Zinc Oxide Material

Monday, October 26, 1998 - Friday, October 30, 1998

1. Decontaminate Buildings for Demolition
2. Demolish Buildings / Collect Metal for Recycling

Monday, November 2, 1998 - Friday, November 6, 1998

1. Decontaminate Buildings for Demolition
2. Demolish Buildings / Collect Metal for Recycling
3. Load Out Zinc Oxide Waste

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Monday, November 9, 1998 - Thursday, November 12, 1998

1. Decontaminate Buildings for Demolition
2. Demolish Buildings / Collect Metal for Recycling
3. Waste Characterization
4. Demolish Block Building

Monday, November 16, 1998 - Saturday, November 20, 1998

1. Decontaminate Buildings for Demolition
2. Demolish Buildings / Collect Metal for Recycling
3. Collect and Stockpile Wood Debris

Monday, November 23, 1998 - Wednesday, November 25, 1998

1. Decontaminate Buildings for Demolition
2. Demolish Buildings / Collect Metal for Recycling
3. Collect and Stockpile Wood Debris
4. Collect and Stockpile Concrete Block Debris

Monday, November 30, 1998 - Friday, December 4, 1998

1. Demolish Buildings / Collect Metal for Recycling
2. Access Road Preparation
3. Wet, Collect and Stockpile Zinc Oxide Material
4. Load Out Zinc Oxide Waste

Monday, December 7, 1998 - Friday, December 11, 1998

1. Demolish Buildings / Collect Metal for Recycling
2. Demobilize Equipment
3. Wet, Collect and Stockpile Zinc Oxide Material
4. Load Out Zinc Oxide Waste
5. Wet, Collect and Stockpile Fuel Oil Contaminated Material
6. Collect and Stockpile Wood Debris



Monday, December 14, 1998 - Friday, December 18, 1998

1. Demolish Buildings / Collect Metal for Recycling
2. Decontaminate Buildings for Demolition
3. Wet, Collect and Stockpile Fuel Oil Contaminated Material
4. Load Out Fuel Oil Contaminated Material
5. Fill Pit in Building #5

Monday, December 21, 1998 - Wednesday, December 23, 1998

1. Demolish Buildings / Collect Metal for Recycling
2. Decontaminate Buildings for Demolition
3. Fill Pit in Building #5

Monday, December 28, 1998 - Thursday, December 31, 1998

1. Demolish Buildings / Collect Metal for Recycling
2. Fill Pit in Building #5

Monday, January 4, 1999 - Wednesday, January 6, 1999

1. Snow and Ice Removal
2. Demolish Buildings / Collect Metal for Recycling
3. Fill Pit in Building #5

Monday, January 11, 1999 - Friday, January 15, 1999

1. Snow and Ice Removal
2. Demolish Buildings / Collect Metal for Recycling

Monday, January 18, 1999 - Friday, January 22, 1999

1. Demolish Buildings / Collect Metal for Recycling
2. Demobilize Equipment and Equipment Trailer

Monday, January 25, 1999 - Friday, January 29, 1999

1. Demolish Buildings / Collect Metal for Recycling
2. Disconnect Utilities / Demobilize Office Trailer

Tuesday, February 2, 1999 - Thursday, February 4, 1999

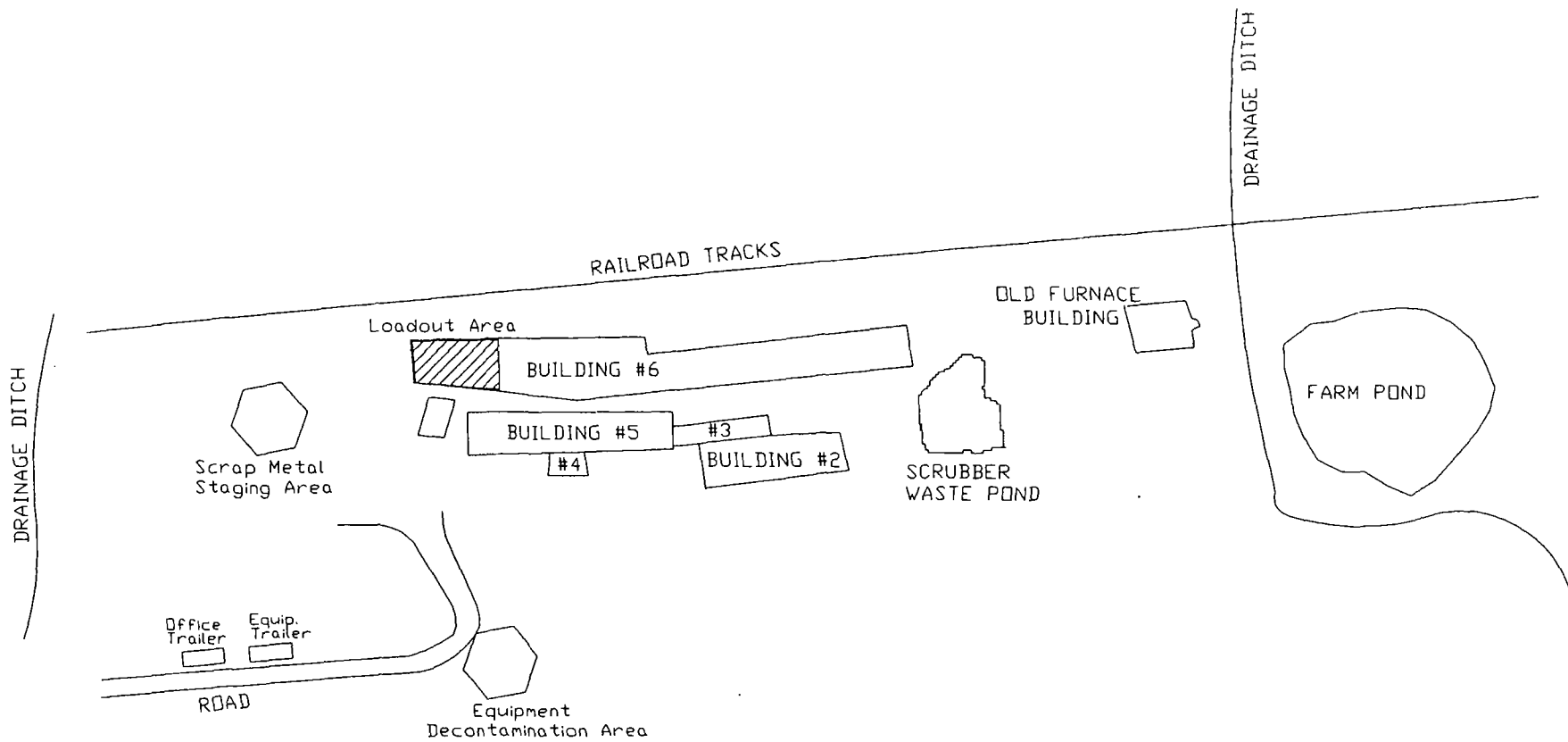
1. Collect Metal for Recycling

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FIGURES



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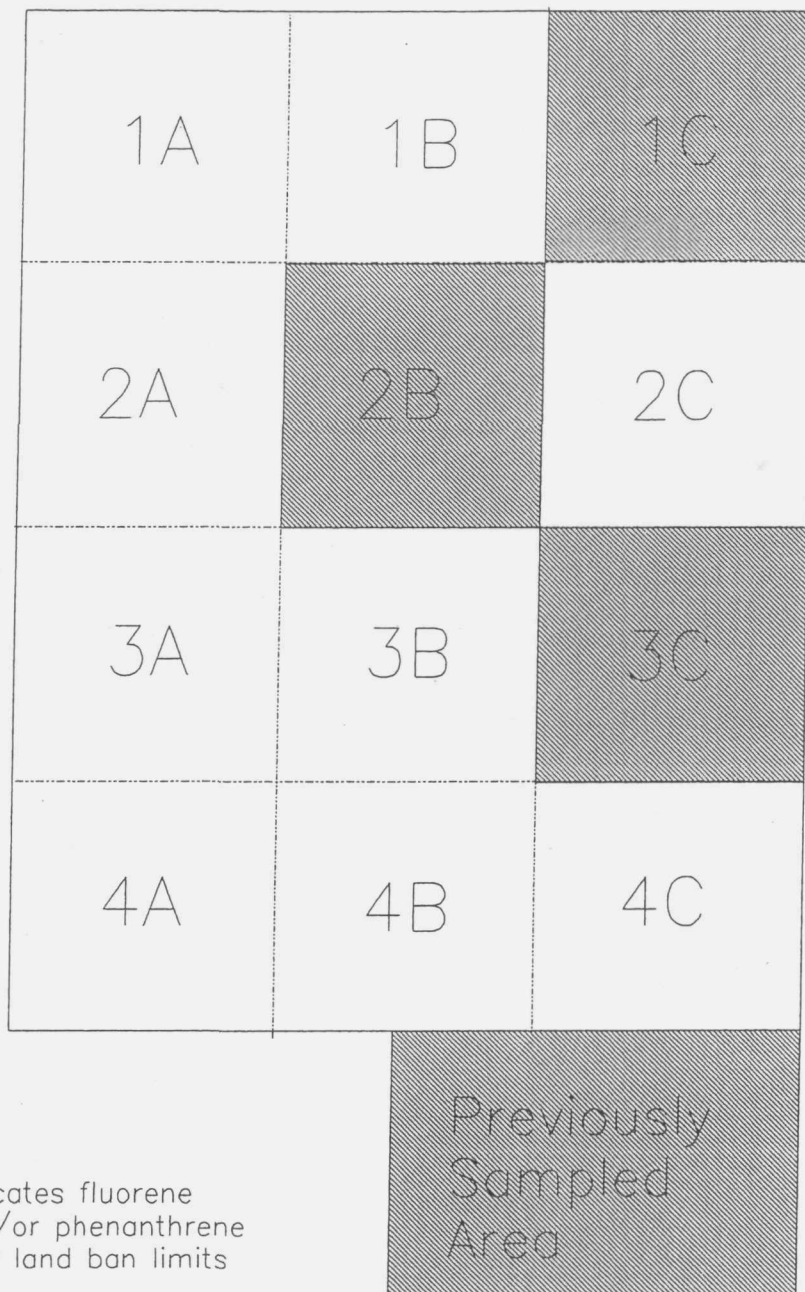


REVISION #	DATE	Checked By	Approved
1	10/06/98	HTS	HTS
Proj. Manager: H. Stremlau		Drawn By: D. Wagner	

FIGURE 1
SITE LOCATION DRAWING
SANDOVAL ZINC SITE



PROJECT NUMBER	SOFTWARE	DRAWING NAME
6536.04	AutoCAD	C:\contour\sandov



Note: Grid areas are approximately 12' x 12'



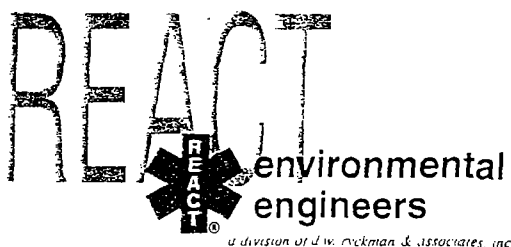
SCALE:
Not to Scale

FIGURE 2
LOADOUT AREA
SAMPLING GRID



PROJECT #6536.04
Sandoval Zinc
Sandoval, Illinois

APPENDIX A
CERTIFICATIONS OF RECYCLING -- ABOVE GROUND TANKS



1733 S. Vandeventer Avenue
St. Louis, MO 63110-2223
314-772-2326
314-772-6610 FAX
REACT@mvp.net
800-325-1398 24 Hour

REACT Project No. 6536.04

Foster's Salvage
East First Street Box 473
Beckmeyer, IL 62219

**RE: Two ASTs from the Sandoval Zinc site
Sandoval, IL**

Dear Sirs:

The two above ground fuel storage tanks referenced above, which are being delivered for salvage (scrap), originally contained fuel oil and have been scraped and washed of residues and wiped dry. They do not contain any residues.

Please sign and date this letter on the appropriate line below, showing your receipt of these tanks.

Tank relinquished by:

James R. Jenkins
JAMES R. JENKINS

Date 6/25/98

Tank accepted by:

Foster Salvage
Name OW Foster

Date 6/25/98

FOSTER SALVAGE
Company

APPENDIX B
ANALYTICAL RESULTS AND CHAIN-OF-CUSTODY -- GRID SAMPLES

11/24/98
18:44

PDC LABORATORIES, INC.
ENVIRONMENTAL/ANALYTICAL SERVICES

PAGE : 1

FEL (309) 692-9688


P.O. BOX 9071
PEORIA, IL 61612

SAMPLE 98110553
ANALYTICAL REPORT FORM

TO REACT ENVIRONMENTAL ENGR DATE COLLECTED 11/10/98 SALES WOOLERY D L
1733 S VANDEVENTER AVE. DATE RECEIVED 11/11/98 SAMP # 98110553
DATE DUE 11/23/98 PDC #
ST LOUIS DATE COMPLETE 11/24/98 PERM #
MO 631102223 DATE LOGGED IN 11/11/98 P.O. # 6536.04
ATTN HENRY STREMLAU PHONE# (314) 772-2326 PRJ MGR SPIVA G L
VERIFIED BY G L S CUST # 0201184
COLOR PHYSICAL STATE SOLID NUMBER/PHASES 1
DESCRIPTION ZINC OXIDE SAMPLE #1A
REMARKS
CHAIN OF CUSTODY YES

TEST NAME	REPORTING LEVEL	SAMPLE RESULT	UNIT OF MEASURE	DATE ANALYZED
Fluorene/Phenanthrene	PACKAGE METHOD :			
Fluorene		<3300 S	ug/kg	11/22/98
Phenanthrene		<3300 S	ug/kg	11/22/98
Prep Base/Neutrals Soil		DONE	PROCESS	11/20/98

NOTE 1: ALL ANALYSES ARE CONDUCTED UTILIZING RECOMMENDED USEPA AND IEPA METHODS


PROJECT MANAGER 11-24-98
PDC LABORATORIES, INC.

11/24/98
18:44

PDC LABORATORIES, INC.
ENVIRONMENTAL/ANALYTICAL SERVICES

PAGE : 1

TEL (309) 692-9688

P.O. BOX 9071
PEORIA, IL 61612


SAMPLE 98110554
ANALYTICAL REPORT FORM

TO REACT ENVIRONMENTAL ENGR DATE COLLECTED 11/10/98 SALES WOOLERY D L
1733 S VANDEVENTER AVE. DATE RECEIVED 11/11/98 SAMP # 98110554
DATE DUE 11/23/98 PDC #
ST LOUIS DATE COMPLETE 11/24/98 PERM #
MO 631102223 DATE LOGGED IN 11/11/98 P.O. # 6536.04
ATTN HENRY STREMLAU PHONE# (314) 772-2326 PRJ MGR SPIVA G L
VERIFIED BY G L S CUST # 0201184
COLOR PHYSICAL STATE SOLID NUMBER/PHASES 1
DESCRIPTION ZINC OXIDE SAMPLE #1B
REMARKS
CHAIN OF CUSTODY YES

TEST NAME	REPORTING LEVEL	SAMPLE RESULT	UNIT OF MEASURE	DATE ANALYZED

Fluorene/Phenanthrene	PACKAGE METHOD :			
Fluorene	<3300 S	ug/kg		11/22/98
Phenanthrene	5500 S	ug/kg		11/22/98
Prep Base/Neutrals Soil	DONE	PROCESS		11/20/98

NOTE 1: ALL ANALYSES ARE CONDUCTED UTILIZING RECOMMENDED USEPA AND IEPA METHODS


PROJECT MANAGER 11-24-98
PDC LABORATORIES, INC.

11/24/98
18:44

PDC LABORATORIES, INC.
ENVIRONMENTAL/ANALYTICAL SERVICES

PAGE : 1

FEL (309) 692-9688

P.O. BOX 9071
PEORIA, IL 61612

SAMPLE 98110555
ANALYTICAL REPORT FORM

TO REACT ENVIRONMENTAL ENGR DATE COLLECTED 11/10/98 SALES WOOLERY D L
1733 S VANDEVENTER AVE. DATE RECEIVED 11/11/98 SAMP # 98110555
DATE DUE 11/23/98 PDC #
ST LOUIS DATE COMPLETE 11/24/98 PERM #
MO 631102223 DATE LOGGED IN 11/11/98 P.O. # 6536.04
ATTN HENRY STREMLAU PHONE# (314) 772-2326 PRJ MGR SPIVA G L
VERIFIED BY G L S CUST # 0201184

COLOR PHYSICAL STATE SOLID NUMBER/PHASES 1

DESCRIPTION ZINC OXIDE SAMLE #1C

REMARKS

CHAIN OF CUSTODY YES

TEST NAME	REPORTING LEVEL	SAMPLE RESULT	UNIT OF MEASURE	DATE ANALYZED
-----------	--------------------	------------------	--------------------	------------------

Fluorene/Phenanthrene PACKAGE METHOD :

Fluorene	<3300 S F	ug/kg	11/22/98
Phenanthrene	26000 S F	ug/kg	11/22/98
Prep Base/Neutrals Soil	DONE	PROCESS	11/20/98

NOTE 1: ALL ANALYSES ARE CONDUCTED UTILIZING RECOMMENDED USEPA AND IEPA METHODS


PROJECT MANAGER
PDC LABORATORIES, INC.

11-24-98

11/24/98
18:44

PDC LABORATORIES, INC.
ENVIRONMENTAL/ANALYTICAL SERVICES

PAGE :

FEL (309) 692-9688


P.O. BOX 9071
PEORIA, IL 61612

SAMPLE 98110556
ANALYTICAL REPORT FORM

TO REACT ENVIRONMENTAL ENGR DATE COLLECTED 11/10/98 SALES WOOLERY D L
1733 S VANDEVENTER AVE. DATE RECEIVED 11/11/98 SAMP # 98110556
DATE DUE 11/23/98 PDC #
ST LOUIS DATE COMPLETE 11/24/98 PERM #
MO 631102223 DATE LOGGED IN 11/11/98 P.O. # 6536.04
ATTN HENRY STREMLAU PHONE# (314) 772-2326 PRJ MGR SPIVA G L
VERIFIED BY G L S CUST # 0201184
COLOR PHYSICAL STATE SOLID NUMBER/PHASES 1
DESCRIPTION ZINC OXIDE SAMPLE #2A
REMARKS
CHAIN OF CUSTODY YES

TEST NAME	REPORTING LEVEL	SAMPLE RESULT	UNIT OF MEASURE	DATE ANALYZED
Fluorene/Phenanthrene	PACKAGE METHOD :			
Fluorene		<3300 S F	ug/kg	11/22/98
Phenanthrene		5000 S F	ug/kg	11/22/98
Prep Base/Neutrals Soil		DONE	PROCESS	11/20/98

NOTE 1: ALL ANALYSES ARE CONDUCTED UTILIZING RECOMMENDED USEPA AND IEPA METHODS


PROJECT MANAGER 11-24-98
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PEORIA, IL 61612


SAMPLE 98110557

ANALYTICAL REPORT FORM

TO REACT ENVIRONMENTAL ENGR DATE COLLECTED 11/10/98 SALES WOOLERY D L
1733 S VANDEVENTER AVE. DATE RECEIVED 11/11/98 SAMP # 98110557
DATE DUE 11/23/98 PDC #
ST LOUIS DATE COMPLETE 11/24/98 PERM #
MO 631102223 DATE LOGGED IN 11/11/98 P.O. # 6536.04
ATTN HENRY STREMLAU PHONE# (314) 772-2326 PRJ MGR SPIVA G L
VERIFIED BY G L S CUST # 0201184
COLOR PHYSICAL STATE SOLID NUMBER/PHASES 1
DESCRIPTION ZINC OXIDE SAMPLE #2B
REMARKS
CHAIN OF CUSTODY YES

TEST NAME	REPORTING LEVEL	SAMPLE RESULT	UNIT OF MEASURE	DATE ANALYZED
Fluorene/Phenanthrene	PACKAGE METHOD :			
Fluorene		<3300 S	ug/kg	11/22/98
Phenanthrene		12000 S	ug/kg	11/22/98
Prep Base/Neutrals Soil		DONE	PROCESS	11/20/98

NOTE 1: ALL ANALYSES ARE CONDUCTED UTILIZING RECOMMENDED USEPA AND IEPA METHODS


PROJECT MANAGER 11-24-98
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ENVIRONMENTAL/ANALYTICAL SERVICES

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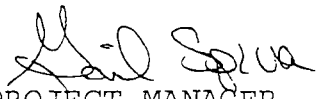
P.O. BOX 9071
PEORIA, IL 61612

SAMPLE 98110558
ANALYTICAL REPORT FORM

TO REACT ENVIRONMENTAL ENGR DATE COLLECTED 11/10/98 SALES WOOLERY D L
1733 S VANDEVENTER AVE. DATE RECEIVED 11/11/98 SAMP # 98110558
DATE DUE 11/23/98 PDC #
ST LOUIS DATE COMPLETE 11/24/98 PERM #
MO 631102223 DATE LOGGED IN 11/11/98 P.O. # 6536.04
ATTN HENRY STREMLAU PHONE# (314) 772-2326 PRJ MGR SPIVA G L
VERIFIED BY G L S CUST # 0201184
COLOR PHYSICAL STATE SOLID NUMBER/PHASES 1
DESCRIPTION ZINC OXIDE SAMPLE #2C
REMARKS
CHAIN OF CUSTODY YES

TEST NAME	REPORTING LEVEL	SAMPLE RESULT	UNIT OF MEASURE	DATE ANALYZED
Fluorene/Phenanthrene	PACKAGE METHOD :			
Fluorene	<3300 S	ug/kg		11/22/98
Phenanthrene	5000 S	ug/kg		11/22/98
Prep Base/Neutrals Soil	DONE	PROCESS		11/20/98

NOTE 1: ALL ANALYSES ARE CONDUCTED UTILIZING RECOMMENDED USEPA AND IEPA METHODS


PROJECT MANAGER 11-24-98
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ENVIRONMENTAL/ANALYTICAL SERVICES

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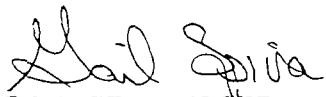
P.O. BOX 9071
PEORIA, IL 61612

SAMPLE 98110559
ANALYTICAL REPORT FORM

TO REACT ENVIRONMENTAL ENGR DATE COLLECTED 11/10/98 SALES WOOLERY D L
1733 S VANDEVENTER AVE. DATE RECEIVED 11/11/98 SAMP # 98110559
ST LOUIS DATE DUE 11/23/98 PDC #
MO 631102223 DATE COMPLETE 11/24/98 PERM #
ATTN HENRY STREMLAU DATE LOGGED IN 11/11/98 P.O. # 6536.04
PHONE# (314) 772-2326 PRJ MGR SPIVA G L
VERIFIED BY G L S CUST # 0201184
COLOR PHYSICAL STATE SOLID NUMBER/PHASES 1
DESCRIPTION ZINC OXIDE SAMPLE #3A
REMARKS
CHAIN OF CUSTODY YES

TEST NAME	REPORTING LEVEL	SAMPLE RESULT	UNIT OF MEASURE	DATE ANALYZED
Fluorene/Phenanthrene	PACKAGE METHOD :			
Fluorene		<3300 S F	ug/kg	11/22/98
Phenanthrene		<3300 S F	ug/kg	11/22/98
Prep Base/Neutrals Soil		DONE	PROCESS	11/20/98

NOTE 1: ALL ANALYSES ARE CONDUCTED UTILIZING RECOMMENDED USEPA AND IEPA METHODS


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ENVIRONMENTAL/ANALYTICAL SERVICES

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P.O. BOX 9071
PEORIA, IL 61612

SAMPLE 98110560
ANALYTICAL REPORT FORM

TO REACT ENVIRONMENTAL ENGR DATE COLLECTED 11/10/98 SALES WOOLERY D L
1733 S VANDEVENTER AVE. DATE RECEIVED 11/11/98 SAMP # 98110560
DATE DUE 11/23/98 PDC #
ST LOUIS DATE COMPLETE 11/24/98 PERM #
MO 631102223 DATE LOGGED IN 11/11/98 P.O. # 6536.04
ATTN HENRY STREMLAU PHONE# (314) 772-2326 PRJ MGR SPIVA G L
VERIFIED BY G L S CUST # 0201184
COLOR PHYSICAL STATE SOLID NUMBER/PHASES 1
DESCRIPTION ZINC OXIDE SAMPLE #3B
REMARKS
CHAIN OF CUSTODY YES

TEST NAME	REPORTING LEVEL	SAMPLE RESULT	UNIT OF MEASURE	DATE ANALYZED
Fluorene/Phenanthrene	PACKAGE METHOD :			
Fluorene		<3300 S F	ug/kg	11/22/98
Phenanthrene		<3300 S F	ug/kg	11/22/98
Prep Base/Neutrals Soil		DONE	PROCESS	11/20/98

NOTE 1: ALL ANALYSES ARE CONDUCTED UTILIZING RECOMMENDED USEPA AND IEPA METHODS


PROJECT MANAGER 11-24-98
PDC LABORATORIES, INC.

11/25/98
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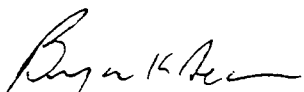
P.O. BOX 9071
PEORIA, IL 61612

SAMPLE 98110561
ANALYTICAL REPORT FORM

TO REACT ENVIRONMENTAL ENGR DATE COLLECTED 11/10/98 SALES WOOLERY D L
1733 S VANDEVENTER AVE. DATE RECEIVED 11/11/98 SAMP # 98110561
DATE DUE 11/23/98 PDC #
ST LOUIS DATE COMPLETE 11/25/98 PERM #
MO 631102223 DATE LOGGED IN 11/11/98 P.O. # 6536.04
ATTN HENRY STREMLAU PHONE# (314) 772-2326 PRJ MGR SPIVA G L
VERIFIED BY B K D CUST # 0201184
COLOR PHYSICAL STATE SOLID NUMBER/PHASES 1
DESCRIPTION ZINC OXIDE SAMPLE #3C
REMARKS
CHAIN OF CUSTODY YES

TEST NAME	REPORTING LEVEL	SAMPLE RESULT	UNIT OF MEASURE	DATE ANALYZED
Fluorene/Phenanthrene	PACKAGE METHOD :			
Fluorene		<3300 S F	ug/kg	11/25/98
Phenanthrene		26000 S F	ug/kg	11/25/98
Prep Base/Neutrals Soil		DONE	PROCESS	11/20/98

NOTE 1: ALL ANALYSES ARE CONDUCTED UTILIZING RECOMMENDED USEPA AND IEPA METHODS

 11/25/98
PROJECT MANAGER
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11/24/98
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ENVIRONMENTAL/ANALYTICAL SERVICES

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PEORIA, IL 61612

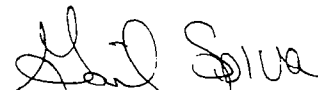
SAMPLE 98110562

ANALYTICAL REPORT FORM

TO REACT ENVIRONMENTAL ENGR DATE COLLECTED 11/10/98 SALES WOOLERY D L
1733 S VANDEVENTER AVE. DATE RECEIVED 11/11/98 SAMP # 98110562
DATE DUE 11/23/98 PDC #
ST LOUIS DATE COMPLETE 11/24/98 PERM #
MO 631102223 DATE LOGGED IN 11/11/98 P.O. # 6536.04
ATTN HENRY STREMLAU PHONE# (314)772-2326 PRJ MGR SPIVA G L
VERIFIED BY G L S CUST # 0201184
COLOR PHYSICAL STATE SOLID NUMBER/PHASES 1
DESCRIPTION ZINC OXIDE SAMPLE #4A
REMARKS
CHAIN OF CUSTODY YES

TEST NAME	REPORTING LEVEL	SAMPLE RESULT	UNIT OF MEASURE	DATE ANALYZED
Fluorene/Phenanthrene	PACKAGE METHOD :			
Fluorene		<3300 S	ug/kg	11/22/98
Phenanthrene		<3300 S	ug/kg	11/22/98
Prep Base/Neutrals Soil		DONE	PROCESS	11/20/98

NOTE 1: ALL ANALYSES ARE CONDUCTED UTILIZING RECOMMENDED USEPA AND IEPA METHODS


PROJECT MANAGER 11-24-98
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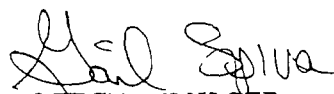
P.O. BOX 9071
PEORIA, IL 61612

SAMPLE 98110563
ANALYTICAL REPORT FORM

TO REACT ENVIRONMENTAL ENGR DATE COLLECTED 11/10/98 SALES WOOLERY D L
1733 S VANDEVENTER AVE. DATE RECEIVED 11/11/98 SAMP # 98110563
DATE DUE 11/23/98 PDC #
ST LOUIS DATE COMPLETE 11/24/98 PERM #
MO 631102223 DATE LOGGED IN 11/11/98 P.O. # 6536.04
ATTN HENRY STREMLAU PHONE# (314) 772-2326 PRJ MGR SPIVA G L
VERIFIED BY G L S CUST # 0201184
COLOR PHYSICAL STATE SOLID NUMBER/PHASES 1
DESCRIPTION ZINC OXIDE SAMPLE #4B
REMARKS
CHAIN OF CUSTODY YES

TEST NAME	REPORTING LEVEL	SAMPLE RESULT	UNIT OF MEASURE	DATE ANALYZED
Fluorene/Phenanthrene	PACKAGE METHOD :			
Fluorene		<3300 S F	ug/kg	11/22/98
Phenanthrene		<3300 S F	ug/kg	11/22/98
Prep Base/Neutrals Soil		DONE	PROCESS	11/20/98

NOTE 1: ALL ANALYSES ARE CONDUCTED UTILIZING RECOMMENDED USEPA AND IEPA METHODS


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ENVIRONMENTAL/ANALYTICAL SERVICES

PAGE :

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PEORIA, IL 61612

SAMPLE 98110564
ANALYTICAL REPORT FORM

TO REACT ENVIRONMENTAL ENGR DATE COLLECTED 11/10/98 SALES WOOLERY D L
1733 S VANDEVENTER AVE. DATE RECEIVED 11/11/98 SAMP # 98110564
ST LOUIS DATE DUE 11/23/98 PDC #
MO 631102223 DATE COMPLETE 11/24/98 PERM #
ATTN HENRY STREMLAU DATE LOGGED IN 11/11/98 P.O. # 6536.04
PHONE# (314) 772-2326 PRJ MGR SPIVA G L
VERIFIED BY G L S CUST # 0201184
COLOR PHYSICAL STATE SOLID NUMBER/PHASES 1
DESCRIPTION ZINC OXIDE SAMPLE #4C
REMARKS
CHAIN OF CUSTODY YES

TEST NAME	REPORTING LEVEL	SAMPLE RESULT	UNIT OF MEASURE	DATE ANALYZED
Fluorene/Phenanthrene	PACKAGE METHOD :			
Fluorene		<3300 S	ug/kg	11/22/98
Phenanthrene		<3300 S	ug/kg	11/22/98
Prep Base/Neutrals Soil		DONE	PROCESS	11/20/98

NOTE 1: ALL ANALYSES ARE CONDUCTED UTILIZING RECOMMENDED USEPA AND IEPA METHODS


PROJECT MANAGER
PDC LABORATORIES, INC.

11-24-98

- A = The presence of this analyte was confirmed using a second column but there was a disparity (>40% relative percent difference) between the two sets of results. The higher of the two results has been reported.
- B = _____ present in the method blank at _____.
- C = Compound's identification confirmed by GC-MS.
- E = Concentration exceeds the instrument calibration range of _____ at a _____ dilution. Sample was not reanalyzed at a larger dilution due to the level of constituents and regulatory/quality control guidelines.
- F = Internal standard area outside acceptable QC criteria on duplicate analysis.
- H = This test was performed after expiration of the appropriate regulatory/advisory "hold time".
- K = The relative standard deviation (RSD) for this analyte failed to meet the _____ %RSD acceptance criteria for the initial calibration. The mean %RSD for all the analytes included in the initial calibration was _____ %RSD which is within acceptance limits.
- L = The % difference for this analyte failed to meet the _____ % acceptance criteria for the calibration verification standard. The mean % difference for all the analytes included in the calibration verification standard was _____ % which is within acceptance limits.
- P = Insufficient sample preservation noted at the time of the test.
- Q = Sample matrix spike recovery outside acceptance limits. Method control check sample recoveries were acceptable. Data was generated with the analytical method in control but sample associated matrix effects were evident.
- R = Surrogate recovery was outside matrix acceptance criteria due to the presence of a visible matrix effect in the volatile GC-MS spectrum. The surrogate (one of three) recovered within 50% of the true value.
- S = Surrogate compound diluted below reliable quantitation level due to matrix interferences.
- T = Surrogate recovery was outside matrix acceptance criteria in initial analysis. Sample was re-extracted (if required by the method), reanalyzed and recovery was again outside matrix acceptance criteria. Data was generated with the analytical method in control but sample associated matrix effects were evident.
- V = Continuing calibration verification standard failed QC criteria on two independent batch analyses.
- W = Duplicate analysis associated with the analytical batch failed acceptance criteria. Data was generated with the analytical method in control but sample associated matrix effects were evident.
- Y = Surrogate recovery was outside matrix acceptance criteria in initial analysis. Sample was re-extracted (if required by the method) and reanalyzed after the expiration of the regulatory hold time and a value of _____ was obtained.
- NA = Not Analyzed.
- NR = The reportable test is not required due to the level of related constituents and/or regulatory/quality control guidelines.
- X =

PDC LABORATORIES, INC.
2231 W. ALTORFER DRIVE
PEORIA, IL 61615
(SHIPPING ADDRESS ONLY)

PHONE #
(309) 692-9688
FAX #
(309) 692-9689



CHAIN OF CUSTODY RECORD

LAB NUMBER(S) 98110553 98110565
PAGE 381 OF 56

PLEASE PRINT. INSTRUCTIONS ON REVERSE SIDE CORRESPONDING WITH CIRCLED NUMBERS.

CLIENT REACT / IEPA		PROJECT NUMBER 6536.04		P.O. NUMBER		MEANS OF SHIPPING Fcd Ex		ANALYSIS DESIRED (5) <i>PNA's fluorene & phenanthrene only - 8270C of T.M. 11-11-98 Need 3.4 & 5.6 GLS respectively (mg/Lg)</i>				
ADDRESS 1733 S. Vandeventer		PHONE NUMBER 314-772-2326		FAX NUMBER 314-772-6610		DATE SHIPPED 11/10/98						
CITY & STATE St. Louis, Mo. 63108		SAMPLER (PLEASE PRINT) James R. Jenkins				MATRIX (4)						
CONTACT PERSON Henry Stremlau		SAMPLER'S SIGNATURE <i>James R. Jenkins</i>				TOTAL NUMBER OF CONTAINERS						
SAMPLE DESCRIPTION			DATE COLLECTED	TIME COLLECTED	COMPOSITE (3)		WATER	SOIL	OTHER	TOTAL NUMBER OF CONTAINERS	REMARKS (6)	
					GRAB							
Zinc Oxide Sample # 1A			11/10/98		X			X		1	X	
" " # 1B			11/10/98		X			X		1	X	
" " # 1C			11/10/98		X			X		1	X	
" " # 2A			11/10/98		X			X		1	X	
" " # 2B			11/10/98		X			X		1	X	
" " # 2C			11/10/98		X			X		1	X	
" " # 3A			11/10/98		X			X		1	X	
" " # 3B			11/10/98		X			X		1	X	
" " # 3C			11/10/98		X			X		1	X	
" " # 4A			11/10/98		X			X		1	X	
TURNAROUND TIME REQUESTED (PLEASE CIRCLE) (7) <u>NORMAL</u> RUSH					Special Instructions: (8)							
RUSH RESULTS VIA: (PLEASE CIRCLE) FAX# IF DIFFERENT FROM ABOVE: PHONE# IF DIFFERENT FROM ABOVE:												
RELINQUISHED BY: (SIGNATURE) <i>James R. Jenkins</i>		TIME/DATE 11/10/98	RECEIVED BY: (SIGNATURE)		Discrepancies between sample labels and COC record Samples were: (10) Chilled Received on ice Received in good condition Received in proper container Received within holding time		Notes: Y or N <i>(Y)</i> or N <i>(Y)</i> or N <i>(Y)</i> or N <i>(Y)</i> or N					
RELINQUISHED BY: (SIGNATURE)		TIME/DATE 11/11/98	RECEIVED FOR LABORATORY BY: (SIGNATURE) <i>Tony King</i>									

PHONE ☎
(309) 692-9688
FAX ☎
(309) 692-9689



LAB NUMBER(S)

PLEASE PRINT. INSTRUCTIONS ON REVERSE SIDE CORRESPONDING WITH CIRCLED NUMBERS

PAGE _____ OF _____

[illegible]

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PDG LABS

002:002

APPENDIX C
CERTIFICATES OF WELL CLOSURE

ILLINOIS DEPARTMENT OF PUBLIC HEALTH
DIVISION OF ENVIRONMENTAL HEALTH
525 WEST JEFFERSON STREET
SPRINGFIELD, ILLINOIS 62761

RETURN ALL COPIES TO IDPH OR
LOCAL HEALTH DEPARTMENT

TYPE OR PRESS FIRMLY

This form shall be submitted to this Department or the local health department not more than 30 days after a water well, boring or monitoring well is sealed. Such wells are to be sealed not more than 30 days after they are abandoned in accordance with the sealing requirements in the Water Well Construction Code.

1. Ownership (Name of Controlling Party) IEPA
2. Well Location: # 1 502 E. Mississippi Ave. SANDOVA, IL. MARION 62882
Address - Lot Number City County
- General Description: Township 2 (N)(S) Range 1 (E)(W) Section 17
Quarter of the Quarter of the Quarter
3. Year Drilled _____
4. Drilling Permit Number (and date, if known) _____
5. Type of Well: Bored _____ Drilled ☒ Other _____
6. Total Depth 19'-8" Diameter (inches) 2"
7. Formation clear of obstruction ☒ Yes _____ No
8. DETAILS OF PLUGGING
Filled with Bentonite from 0 to 19'-8" ft.
(cement or other materials)
Kind of plug _____ from _____ to _____ ft.
Filled with _____ from _____ to _____ ft.
Kind of plug _____ from _____ to _____ ft.
Filled with _____ from _____ to _____ ft.
Kind of plug _____ from _____ to _____ ft.
9. CASING RECORD: Upper 3 feet of casing removed ☒ Yes _____ No
10. Date well was sealed: Month July Day 23 Year 1998
11. Licensed water well driller or other person approved by the Department performing well sealing.
Roberts Environmental Drilling 092-006865
Name Complete License Number
1107 S. Mulberry Millstadt IL. 62260
Address City State/Zip

ILLINOIS DEPARTMENT OF PUBLIC HEALTH
DIVISION OF ENVIRONMENTAL HEALTH
525 WEST JEFFERSON STREET
SPRINGFIELD, ILLINOIS 62761

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1. Ownership (Name of Controlling Party) IEPA
2. Well Location: #2 502 E. Mississippi Ave. SANDOVAL MARION 62882
Address - Lot Number City County
General Description: Township 2 (N)(S) Range 1 (E)(W) Section 17
Quarter of the Quarter of the Quarter
3. Year Drilled _____
4. Drilling Permit Number (and date, if known) _____
5. Type of Well: Bored _____ Drilled ☒ Other _____
6. Total Depth 14'-6" Diameter(inches) 2"
7. Formation clear of obstruction ☒ Yes _____ No
8. DETAILS OF PLUGGING
Filled with Bentonite from 0 to 14'-6" ft.
(cement or other materials)
Kind of plug _____ from _____ to _____ ft.
Filled with _____ from _____ to _____ ft.
Kind of plug _____ from _____ to _____ ft.
Filled with _____ from _____ to _____ ft.
Kind of plug _____ from _____ to _____ ft.
9. CASING RECORD: Upper 3 feet of casing removed ☒ Yes _____ No
10. Date well was sealed: Month July Day 23 Year 1998
11. Licensed water well driller or other person approved by the Department performing well sealing.
Roberts Environmental Drilling 092-006865
Name Complete License Number
1107 S. Mulberry Millstadt IL 62260
Address City State/Zip

ILLINOIS DEPARTMENT OF PUBLIC HEALTH
DIVISION OF ENVIRONMENTAL HEALTH
525 WEST JEFFERSON STREET
SPRINGFIELD, ILLINOIS 62761

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1. Ownership (Name of Controlling Party) IEPA
2. Well Location: #3 502 E. Mississippi Ave SANDOVA MARION 62882
Address - Lot Number City County
- General Description: Township 2 (N)S Range 1 (E)W Section 17
Quarter of the Quarter of the Quarter
3. Year Drilled _____
4. Drilling Permit Number (and date, if known) _____
5. Type of Well: Bored _____ Drilled ☒ Other _____
6. Total Depth 15'5" Diameter(inches) 2"
7. Formation clear of obstruction ☒ Yes _____ No
8. DETAILS OF PLUGGING
Filled with Bentonite from 0 to 15'5" ft.
(cement or other materials)
Kind of plug _____ from _____ to _____ ft.
Filled with _____ from _____ to _____ ft.
Kind of plug _____ from _____ to _____ ft.
Filled with _____ from _____ to _____ ft.
Kind of plug _____ from _____ to _____ ft.
9. CASING RECORD: Upper 3 feet of casing removed ☒ Yes _____ No
10. Date well was sealed: Month July Day 23 Year 1998
11. Licensed water well driller or other person approved by the Department performing well sealing.

Roberts Environmental Drilling
Name

092-006865
Complete License Number

1107 S. Mulberry
Address

Millstadt
City

IL 62260
State/Zip

ILLINOIS DEPARTMENT OF PUBLIC HEALTH
DIVISION OF ENVIRONMENTAL HEALTH
525 WEST JEFFERSON STREET
SPRINGFIELD, ILLINOIS 62761

RETURN ALL COPIES TO IDPH OR
LOCAL HEALTH DEPARTMENT

TYPE OR PRESS FIRMLY

This form shall be submitted to this Department or the local health department not more than 30 days after a water well, boring or monitoring well is sealed. Such wells are to be sealed not more than 30 days after they are abandoned in accordance with the sealing requirements in the Water Well Construction Code.

1. Ownership (Name of Controlling Party) IEPA
2. Well Location: #4 502 E. Mississippi Ave. SANDOVAI MARION 62882
Address - Lot Number City County
- General Description: Township 2 (N)(S) Range 1 (E)(W) Section 17
Quarter of the Quarter of the Quarter
3. Year Drilled _____
4. Drilling Permit Number (and date, if known) _____
5. Type of Well: Bored _____ Drilled ☒ Other _____
6. Total Depth 61'-2" Diameter (inches) 2"
7. Formation clear of obstruction ☒ Yes _____ No
8. DETAILS OF PLUGGING
Filled with Bentonite from 0 to 61'-2" ft.
(cement or other materials)
Kind of plug _____ from _____ to _____ ft.
Filled with _____ from _____ to _____ ft.
Kind of plug _____ from _____ to _____ ft.
Filled with _____ from _____ to _____ ft.
Kind of plug _____ from _____ to _____ ft.
9. CASING RECORD: Upper 3 feet of casing removed ☒ Yes _____ No
10. Date well was sealed: Month July Day 23 Year 1998
11. Licensed water well driller or other person approved by the Department performing well sealing.
Roberts Environmental Drilling 092-006865
Name Complete License Number
1107 S. Mulberry Millstadt IL 62260
Address City State/Zip

ILLINOIS DEPARTMENT OF PUBLIC HEALTH
DIVISION OF ENVIRONMENTAL HEALTH
525 WEST JEFFERSON STREET
SPRINGFIELD, ILLINOIS 62761

RETURN ALL COPIES TO IDPH OR
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TYPE OR PRESS FIRMLY

This form shall be submitted to this Department or the local health department not more than 30 days after a water well, boring or monitoring well is sealed. Such wells are to be sealed not more than 30 days after they are abandoned in accordance with the sealing requirements in the Water Well Construction Code.

1. Ownership (Name of Controlling Party) IEPA
2. Well Location: #5 502 E. Mississippi Ave. SANDOVAL MARION 62882
Address - Lot Number City County
- General Description: Township 2 (N)(S) Range 1 (E)(W) Section 17
Quarter of the Quarter of the Quarter
3. Year Drilled _____
4. Drilling Permit Number (and date, if known) _____
5. Type of Well: Bored _____ Drilled ☒ Other _____
6. Total Depth 12'-2" Diameter(inches) 2"
7. Formation clear of obstruction ☒ Yes _____ No
8. DETAILS OF PLUGGING
Filled with Bentonite from 0 to 12'-2" ft.
(cement or other materials)
Kind of plug _____ from _____ to _____ ft.
Filled with _____ from _____ to _____ ft.
Kind of plug _____ from _____ to _____ ft.
Filled with _____ from _____ to _____ ft.
Kind of plug _____ from _____ to _____ ft.
9. CASING RECORD: Upper 3 feet of casing removed ☒ Yes _____ No
10. Date well was sealed: Month July Day 23 Year 1998
11. Licensed water well driller or other person approved by the Department performing well sealing.
Roberts Environmental Drilling 092-006865
Name Complete License Number
1107 S. Mulberry Millstadt IL 62260
Address City State/Zip

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1. Ownership (Name of Controlling Party) IEPA
2. Well Location: #6 502 E. Mississippi Ave. SANDOVA MARION 62882
Address - Lot Number City County
General Description: Township 2 (N)(S) Range 1 (E)(W) Section 17
Quarter of the Quarter of the Quarter
3. Year Drilled _____
4. Drilling Permit Number (and date, if known) _____
5. Type of Well: Bored _____ Drilled ☒ Other _____
6. Total Depth 69'-8" Diameter(inches) 2"
7. Formation clear of obstruction ☒ Yes _____ No
8. DETAILS OF PLUGGING
Filled with Bentonite from 0 to 69'-8" ft.
(cement or other materials)
Kind of plug _____ from _____ to _____ ft.
Filled with _____ from _____ to _____ ft.
Kind of plug _____ from _____ to _____ ft.
Filled with _____ from _____ to _____ ft.
Kind of plug _____ from _____ to _____ ft.
9. CASING RECORD: Upper 3 feet of casing removed ☒ Yes _____ No
10. Date well was sealed: Month July Day 23 Year 1998
11. Licensed water well driller or other person approved by the Department performing well sealing.
Roberts Environmental Drilling 092-006865
Name Complete License Number
1107 S. Mulberry Millstadt IL 62260
Address City State/Zip

ILLINOIS DEPARTMENT OF PUBLIC HEALTH
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1. Ownership (Name of Controlling Party) IEPA
2. Well Location: #7 502 E. Mississippi Ave. SANDOVAL MARION 62882
Address - Lot Number City County
- General Description: Township 2 (N) Range 1 (E) Section 17
Quarter of the Quarter of the Quarter
3. Year Drilled _____
4. Drilling Permit Number (and date, if known) _____
5. Type of Well: Bored _____ Drilled ☒ Other _____
6. Total Depth 8'-0" Diameter(inches) 2"
7. Formation clear of obstruction ☒ Yes _____ No
8. DETAILS OF PLUGGING
Filled with Bentonite from 0 to 8'-0" ft.
(cement or other materials)
Kind of plug _____ from _____ to _____ ft.
Filled with _____ from _____ to _____ ft.
Kind of plug _____ from _____ to _____ ft.
Filled with _____ from _____ to _____ ft.
Kind of plug _____ from _____ to _____ ft.
9. CASING RECORD: Upper 3 feet of casing removed ☒ Yes _____ No
10. Date well was sealed: Month July Day 23 Year 1998
11. Licensed water well driller or other person approved by the Department performing well sealing.
Roberts Environmental Drilling 092-006865
Name Complete License Number
1107 S. Mulberry Millstadt IL 62260
Address City State/Zip

ILLINOIS DEPARTMENT OF PUBLIC HEALTH
DIVISION OF ENVIRONMENTAL HEALTH
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- Ownership (Name of Controlling Party) IEPA
- Well Location: #8 502 E. Mississippi Ave SANDOVA MARION 62882
Address - Lot Number City County
General Description: Township 2 (N)(S) Range 1 (E)(W) Section 17
Quarter of the Quarter of the Quarter
- Year Drilled _____
- Drilling Permit Number (and date, if known) _____
- Type of Well: Bored _____ Drilled ☒ Other _____
- Total Depth 12'-0" Diameter(inches) 2"
- Formation clear of obstruction ☒ Yes _____ No
- DETAILS OF PLUGGING
Filled with Bentonite from 0 to 12'-0" ft.
(cement or other materials)
Kind of plug _____ from _____ to _____ ft.
Filled with _____ from _____ to _____ ft.
Kind of plug _____ from _____ to _____ ft.
Filled with _____ from _____ to _____ ft.
Kind of plug _____ from _____ to _____ ft.
- CASING RECORD: Upper 3 feet of casing removed ☒ Yes _____ No
- Date well was sealed: Month July Day 23 Year 1998
- Licensed water well driller or other person approved by the Department performing well sealing.
Roberts Environmental Drilling 092-006865
Name Complete License Number
1107 S. Mulberry Millstadt IL 62260
Address City State/Zip

ILLINOIS DEPARTMENT OF PUBLIC HEALTH
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1. Ownership (Name of Controlling Party) IEPA
2. Well Location: #9 502 E. Mississippi Ave. SANDOVAL MARION 62882
Address - Lot Number City County
- General Description: Township 2 (N)(S) Range 1 (E)(W) Section 17
Quarter of the Quarter of the Quarter
3. Year Drilled _____
4. Drilling Permit Number (and date, if known) _____
5. Type of Well: Bored _____ Drilled ☒ Other _____
6. Total Depth 11' 2" Diameter(inches) 2"
7. Formation clear of obstruction ☒ Yes _____ No
8. DETAILS OF PLUGGING
Filled with Bentonite from 0 to 11' 2" ft.
(cement or other materials)
Kind of plug _____ from _____ to _____ ft.
Filled with _____ from _____ to _____ ft.
Kind of plug _____ from _____ to _____ ft.
Filled with _____ from _____ to _____ ft.
Kind of plug _____ from _____ to _____ ft.
9. CASING RECORD: Upper 3 feet of casing removed ☒ Yes _____ No
10. Date well was sealed: Month July Day 23 Year 1998
11. Licensed water well driller or other person approved by the Department performing well sealing.
Roberts ENVIRONMENTAL Drilling 092-006865
Name Complete License Number
1107 S. Mulberry Millstadt IL 62260
Address City State/Zip

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DIVISION OF ENVIRONMENTAL HEALTH
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1. Ownership (Name of Controlling Party) IEPA
2. Well Location: #10 502 E. Mississippi Ave. SANDOVA MARION 62882
Address - Lot Number City County
General Description: Township 2 (N) Range 1 (E) Section 17
Quarter of the Quarter of the Quarter
3. Year Drilled _____
4. Drilling Permit Number (and date, if known) _____
5. Type of Well: Bored _____ Drilled ☒ Other _____
6. Total Depth 58'-6" Diameter(inches) 2"
7. Formation clear of obstruction ☒ Yes _____ No
8. DETAILS OF PLUGGING
Filled with Bentonite from 0 to 58'-6" ft.
(cement or other materials)
Kind of plug _____ from _____ to _____ ft.
Filled with _____ from _____ to _____ ft.
Kind of plug _____ from _____ to _____ ft.
Filled with _____ from _____ to _____ ft.
Kind of plug _____ from _____ to _____ ft.
9. CASING RECORD: Upper 3 feet of casing removed ☒ Yes _____ No
10. Date well was sealed: Month July Day 23 Year 1998
11. Licensed water well driller or other person approved by the Department performing well sealing.
Roberts Environmental Drilling 092-006865
Name Complete License Number
1107 S Mulberry Millstadt IL 62260
Address City State/Zip

ILLINOIS DEPARTMENT OF PUBLIC HEALTH
DIVISION OF ENVIRONMENTAL HEALTH
525 WEST JEFFERSON STREET
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1. Ownership (Name of Controlling Party) IEPA
2. Well Location: #11 502 E. Mississippi Ave. SANDOVA MARION 62882
Address - Lot Number City County
- General Description: Township 2 (N)(S) Range 1 (E)(W) Section 17
Quarter of the Quarter of the Quarter
3. Year Drilled _____
4. Drilling Permit Number (and date, if known) _____
5. Type of Well: Bored _____ Drilled ☒ Other _____
6. Total Depth 14'-2" Diameter(inches) 2"
7. Formation clear of obstruction ☒ Yes _____ No
8. DETAILS OF PLUGGING
Filled with Bentonite from 0 to 14'-2" ft.
(cement or other materials)
Kind of plug _____ from _____ to _____ ft.
Filled with _____ from _____ to _____ ft.
Kind of plug _____ from _____ to _____ ft.
Filled with _____ from _____ to _____ ft.
Kind of plug _____ from _____ to _____ ft.
9. CASING RECORD: Upper 3 feet of casing removed ☒ Yes _____ No
10. Date well was sealed: Month July Day 23 Year 1998
11. Licensed water well driller or other person approved by the Department performing well sealing.
Roberts Environmental Drilling 092-006865
Name Complete License Number
1107 S. Mulberry Millstadt IL 62260
Address City State/Zip

ILLINOIS DEPARTMENT OF PUBLIC HEALTH
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1. Ownership (Name of Controlling Party) IEPA
2. Well Location: #12 502 E. Mississippi Ave. SANDOVAL MARION 62882
Address - Lot Number City County

General Description: Township 2 (N)(S) Range 1 (E)(W) Section 17
Quarter of the Quarter of the Quarter

3. Year Drilled _____
4. Drilling Permit Number (and date, if known) _____
5. Type of Well: Bored _____ Drilled ☒ Other _____
6. Total Depth 60'-0" Diameter(inches) 2"
7. Formation clear of obstruction ☒ Yes _____ No

8. DETAILS OF PLUGGING

Filled with Bentonite from 0 to 60'-0" ft.
(cement or other materials)

Kind of plug _____ from _____ to _____ ft.

Filled with _____ from _____ to _____ ft.

Kind of plug _____ from _____ to _____ ft.

Filled with _____ from _____ to _____ ft.

Kind of plug _____ from _____ to _____ ft.

9. CASING RECORD: Upper 3 feet of casing removed ☒ Yes _____ No
10. Date well was sealed: Month July Day 23 Year 1998
11. Licensed water well driller or other person approved by the Department performing well sealing.

Roberts Environmental Drilling
Name

092-006865
Complete License Number

1107 S Mulberry
Address

Millstadt
City

IL 62260
State/Zip

ILLINOIS DEPARTMENT OF PUBLIC HEALTH
DIVISION OF ENVIRONMENTAL HEALTH
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SPRINGFIELD, ILLINOIS 62761

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- Ownership (Name of Controlling Party) IEPA
- Well Location: #13 502 E. Mississippi Ave. SANDOVAL MARION 62882
Address - Lot Number City County
General Description: Township 2 (N)S Range 1 (E)W Section 17
Quarter of the Quarter of the Quarter
- Year Drilled _____
- Drilling Permit Number (and date, if known) _____
- Type of Well: Bored _____ Drilled ☒ Other _____
- Total Depth 42'-2" Diameter(inches) 2"
- Formation clear of obstruction ☒ Yes _____ No
- DETAILS OF PLUGGING
Filled with Bentonite from 0 to 42'-2" ft.
(cement or other materials)
Kind of plug _____ from _____ to _____ ft.
Filled with _____ from _____ to _____ ft.
Kind of plug _____ from _____ to _____ ft.
Filled with _____ from _____ to _____ ft.
Kind of plug _____ from _____ to _____ ft.
- CASING RECORD: Upper 3 feet of casing removed ☒ Yes _____ No
- Date well was sealed: Month July Day 23 Year 1998
- Licensed water well driller or other person approved by the Department performing well sealing.
Roberts Environmental Drilling 092-006865
Name Complete License Number
1107 S Mulberry Millstadt IL 62260
Address City State/Zip

ILLINOIS DEPARTMENT OF PUBLIC HEALTH
DIVISION OF ENVIRONMENTAL HEALTH
525 WEST JEFFERSON STREET
SPRINGFIELD, ILLINOIS 62761

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1. Ownership (Name of Controlling Party) IEPA
2. Well Location: #14 502 E. Mississippi Ave SANDOVAL MARION 62882
Address - Lot Number City County
General Description: Township 2 (N)(S) Range 1 (E)(W) Section 17
Quarter of the Quarter of the Quarter
3. Year Drilled _____
4. Drilling Permit Number (and date, if known) _____
5. Type of Well: Bored _____ Drilled ☒ Other _____
6. Total Depth 14'-0" Diameter(inches) 2"
7. Formation clear of obstruction ☒ Yes _____ No
8. DETAILS OF PLUGGING
Filled with Bentonite from 0 to 14'-0" ft.
(cement or other materials)
Kind of plug _____ from _____ to _____ ft.
Filled with _____ from _____ to _____ ft.
Kind of plug _____ from _____ to _____ ft.
Filled with _____ from _____ to _____ ft.
Kind of plug _____ from _____ to _____ ft.
9. CASING RECORD: Upper 3 feet of casing removed ☒ Yes _____ No
10. Date well was sealed: Month July Day 23 Year 1998
11. Licensed water well driller or other person approved by the Department performing well sealing.
Roberts ENVIRONMENTAL Drilling 092-006865
Name Complete License Number
1107 S. Mulberry Millstadt IL 62260
Address City State/Zip

ILLINOIS DEPARTMENT OF PUBLIC HEALTH
DIVISION OF ENVIRONMENTAL HEALTH
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SPRINGFIELD, ILLINOIS 62761

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1. Ownership (Name of Controlling Party) IEPA
2. Well Location: #15 502 E. Mississippi Ave. SANDOVAL MARION 62882
Address - Lot Number City County
- General Description: Township 2 (N)(S) Range 1 (E)(W) Section 17
Quarter of the Quarter of the Quarter
3. Year Drilled _____
4. Drilling Permit Number (and date, if known) _____
5. Type of Well: Bored _____ Drilled ☒ Other _____
6. Total Depth 23'-6" Diameter(inches) 2"
7. Formation clear of obstruction ☒ Yes _____ No
8. DETAILS OF PLUGGING
Filled with Bentonite from 0 to 23'-6" ft.
(cement or other materials)
Kind of plug _____ from _____ to _____ ft.
Filled with _____ from _____ to _____ ft.
Kind of plug _____ from _____ to _____ ft.
Filled with _____ from _____ to _____ ft.
Kind of plug _____ from _____ to _____ ft.
9. CASING RECORD: Upper 3 feet of casing removed ☒ Yes _____ No
10. Date well was sealed: Month July Day 23 Year 1998
11. Licensed water well driller or other person approved by the Department performing well sealing.
Roberts Environmental Drilling 092-006865
Name Complete License Number
1107 S. Mulberry Millstadt IL 62260
Address City State/Zip

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1. Ownership (Name of Controlling Party) IEPA
2. Well Location: #16 502 E. Mississippi Ave SANDOVAL MARION 62882
Address - Lot Number City County
General Description: Township 2 (N)(S) Range 1 (E)(W) Section 17
Quarter of the Quarter of the Quarter
3. Year Drilled _____
4. Drilling Permit Number (and date, if known) _____
5. Type of Well: Bored _____ Drilled ☒ Other _____
6. Total Depth 18'-6" Diameter(inches) 2"
7. Formation clear of obstruction ☒ Yes _____ No
8. DETAILS OF PLUGGING
Filled with Bentonite from 0 to 18'-6" ft.
(cement or other materials)
Kind of plug _____ from _____ to _____ ft.
Filled with _____ from _____ to _____ ft.
Kind of plug _____ from _____ to _____ ft.
Filled with _____ from _____ to _____ ft.
Kind of plug _____ from _____ to _____ ft.
9. CASING RECORD: Upper 3 feet of casing removed ☒ Yes _____ No
10. Date well was sealed: Month July Day 23 Year 1998.
11. Licensed water well driller or other person approved by the Department performing well sealing.
Roberts Environmental Drilling 092-006865
Name Complete License Number
1107 S. Mulberry Millstadt IL 62260
Address City State/Zip

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1. Ownership (Name of Controlling Party) IEPA
2. Well Location: #17 502 E. Mississippi Ave. SANDOVAL MARION 62882
Address - Lot Number City County
- General Description: Township 2 (N)(S) Range 1 (E)(W) Section 17
Quarter of the Quarter of the Quarter
3. Year Drilled _____
4. Drilling Permit Number (and date, if known) _____
5. Type of Well: Bored _____ Drilled ☒ Other _____
6. Total Depth _____ Diameter(inches) 2"
7. Formation clear of obstruction _____ Yes ☒ No
8. DETAILS OF PLUGGING
Filled with Bentonite from 0 to 4'-0" ft.
(cement or other materials)
Kind of plug _____ from _____ to _____ ft.
Filled with _____ from _____ to _____ ft.
Kind of plug _____ from _____ to _____ ft.
Filled with _____ from _____ to _____ ft.
Kind of plug _____ from _____ to _____ ft.
9. CASING RECORD: Upper 3 feet of casing removed ☒ Yes _____ No
10. Date well was sealed: Month July Day 23 Year 1998
11. Licensed water well driller or other person approved by the Department performing well sealing.
Roberts Environmental Drilling 092-000865
Name Complete License Number
1107 S. Mulberry Millstadt IL 62260
Address City State/Zip

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1. Ownership (Name of Controlling Party) IEPA
2. Well Location: #18 502 E. MISSISSIPPI AVE SANDOVAL MARION 62882
Address - Lot Number City County
General Description: Township 2 (N)(S) Range 1 (E)(W) Section 17
Quarter of the Quarter of the Quarter
3. Year Drilled _____
4. Drilling Permit Number (and date, if known) _____
5. Type of Well: Bored _____ Drilled ☒ Other _____
6. Total Depth 15'-0" Diameter(inches) 2"
7. Formation clear of obstruction ☒ Yes _____ No
8. DETAILS OF PLUGGING
Filled with BENTONITE from 0 to 15'-0" ft.
(cement or other materials)
Kind of plug _____ from _____ to _____ ft.
Filled with _____ from _____ to _____ ft.
Kind of plug _____ from _____ to _____ ft.
Filled with _____ from _____ to _____ ft.
Kind of plug _____ from _____ to _____ ft.
9. CASING RECORD: Upper 3 feet of casing removed ☒ Yes _____ No
10. Date well was sealed: Month JULY Day 23 Year 1998
11. Licensed water well driller or other person approved by the Department performing well sealing.
ROBERTS ENVIRONMENTAL DRILLING 092-006865
Name Complete License Number
1107 S. MULBERRY MULLSTADT IL/62260
Address City State/Zip

ILLINOIS DEPARTMENT OF PUBLIC HEALTH
DIVISION OF ENVIRONMENTAL HEALTH
525 WEST JEFFERSON STREET
SPRINGFIELD, ILLINOIS 62761

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1. Ownership (Name of Controlling Party) IEPA
2. Well Location: #19 502 E. MISSISSIPPI AVE. SANDOVAL MARION 62882
Address - Lot Number City County
- General Description: Township 2 (N)(S) Range 1 (E)(W) Section 17
Quarter of the Quarter of the Quarter
3. Year Drilled _____
4. Drilling Permit Number (and date, if known) _____
5. Type of Well: Bored _____ Drilled ☒ Other _____
6. Total Depth 69'-3" Diameter(inches) 2"
7. Formation clear of obstruction Yes ☒ No
8. DETAILS OF PLUGGING
Filled with BENTONITE from 0 to 6'-0" ft.
(cement or other materials)
Kind of plug _____ from _____ to _____ ft.
Filled with _____ from _____ to _____ ft.
Kind of plug _____ from _____ to _____ ft.
Filled with _____ from _____ to _____ ft.
Kind of plug _____ from _____ to _____ ft.
9. CASING RECORD: Upper 3 feet of casing removed ☒ Yes _____ No
10. Date well was sealed: Month JULY Day 23 Year 1998
11. Licensed water well driller or other person approved by the Department performing well sealing.
ROBERTS ENVIRONMENTAL DRILLING 092-006865
Name Complete License Number
1107 S. MULBERRY MILLSTADT IL/62260
Address City State/Zip

APPENDIX D
RECYCLING AGREEMENTS AND SHIPPING TICKETS



ZINC CORPORATION OF AMERICA
300 FRANKFORT ROAD MONACA, PA 15061-2286

(412) 774-1020

October 23, 1998

Mr. Henry Stremmlau
REACT Environmental Engineers
1733 S. Vandeventer Avenue
St. Louis, MO 63110-2223

Re: **Sandoval Zinc Residue**

Attached please find a pro forma purchase order for our purchase of additional loads of residue remaining in the one pile in which we are interested. A formal P.O. will follow in the mail.

The first two loads received here were marginal in zinc content, but nevertheless, they were acceptable for processing into commercial zinc metal. As discussed, our intent is to continue to take this residue until the pile (estimated to be 2-3 more truck loads) is exhausted providing each load received contains enough zinc to justify our continuing interest in receiving the next load. We hope this load by load procedure will satisfy the needs of all parties involved. The criterion for justifying our interest in taking a next load is not clearly cut. Nevertheless, I can give some guidance as follows with the understanding that ZCA's sole judgment will govern:

A zinc content equal to or greater than 35% will trigger the release of the next load.

A zinc content between 30 and 35% is a gray area.

A zinc content in the high 20's will likely cause termination of the purchase order.

A zinc content below 25% will definitely cause termination.

Any residue loaded to truck provided by us will not be rejected due to zinc content.

Without unreasonable delay, we will sample and assay each load upon arrival here, and as soon as the information required is available (one week to ten days), will advise you whether the next load is to be released or the purchase order is to be terminated.

We will take each load, fob truck, Sandoval, IL at no charge for the residue. We will arrange for transportation, and the cost of freight will be for ZCA's account. We will want a reasonable effort at loading at Sandoval to remove foreign debris such as bricks, wood and other miscellaneous items and to minimize loading material from the adjacent pile.

Commencement of this procedure is contingent upon approval from the DEP of Pennsylvania concerning the acceptability of this residue here. The approval process is underway now, and if approved, I will contact Rob Jenkins at the Sandoval site to set up the first load.

Let me know if the above is not satisfactory or if you have any questions.

Sincerely,

T.A. Theobald

A handwritten signature in cursive script, reading 'T.A. Theobald', written in dark ink.

ZINC CORPORATION OF AMERICA**RAW MATERIALS FAX NO. (724) 773-9394****TELECOPY IDENTIFICATION TRANSMITTAL SHEET**

THE INFORMATION CONTAINED IN THIS FACSIMILE TRANSMISSION IS LEGALLY PRIVILEGED AND CONFIDENTIAL AND INTENDED ONLY FOR THE USE OF THE INDIVIDUAL OR ENTITY NAMED BELOW. IF YOU ARE NOT THE INTENDED RECIPIENT, YOU ARE HEREBY NOTIFIED THAT ANY DISSEMINATION, DISTRIBUTION, COPY, OR OTHER USE OF THIS COMMUNICATION IS STRICTLY PROHIBITED. IF YOU HAVE RECEIVED THIS TRANSMISSION IN ERROR, PLEASE NOTIFY US IMMEDIATELY BY TELEPHONE SO THAT WE MAY ARRANGE FOR ITS RETURN TO US. THANK YOU.

DATE: 10-23-98TO: HENRY STREMLAUFROM: Tom A. TheobaldPAGES: 2 + COVER

IF PROBLEMS OCCUR WITH THIS TRANSMISSION, PLEASE CALL 724 773-2214.

COMMENTS:

TS 8602

REACT Environmental Engineers
1733 S. Vandeventer Avenue
St. Louis, MO 63110-2223

Attention: Henry Stremmlau

7060962

Terms NA	FOB & Freight Sandoval, IL	Via Truck	Date October 23, 1998
-------------	-------------------------------	--------------	--------------------------

Approximately 125,000 lbs - Zinc Bearing Residue

Quantity subject to certain conditions per letter dated October 23, 1998.

Price: No Charge

Please show order number TS 8602 on all paperwork

Confirming with Henry Stremmlau and Tom Theobald

Material containing more than 2% organics may be returned at shipper's expense.

ZCA's zinc assay to govern.

SHIPPER		LOADING
SHIPPER	I.E. PA. (React Environ.)	
ORIGIN	SANDOVAL, IZ.	
TIME IN	TIME OUT	DATE
	11:30 A.M.	8/7/98
JAMES R. JACKSON BY <i>[Signature]</i> PLEASE SIGN FULL NAME - NO INITIALS		

COMMODITY
Zinc Oxide

CONSIGNEE	UNLOADING
CONSIGNEE	International Zinc Corp.
DESTINATION	Monaca, PA.
TIME IN	TIME OUT

WM. P. SEVERNS TRUCKING R.R. 3 Box 96, Petersburg, IL 62675 Phone 217-632-7811	
TRUCK NO.	DRIVER NAME
18	
RECEIVED ABOVE MATERIAL IN GOOD ORDER CONSIGNEE NAME: BY: PLEASE SIGN FULL NAME - NO INITIALS	

DISPATCH NUMBER

SHIPPER NUMBER

SHIPPER WEIGHT-LBS
G
T
N

CONSIGNEE NUMBER
H58486

CONSIGNEE WEIGHT-LBS
G
T
N

WHITE BILLING YELLOW ACCOUNTING PINK CONSIGNEE GOLDENROD DRIVER

Project # 6536.04
SANDOVAL ZINC

CONSOLIDATED EXCHANGE, INC.
CARLYLE, ILL. - 594-2223
BARTLESO, ILL. - 765-2116
SANDOVAL, ILL. - 247-3661

Load Zinc Oxide 8-7 19 58
From React Env. Engineers ☐ Buy ☐ Contract ☐ Store
To _____
No. 43950 Gross Wt. 76340 lbs.
32390 Tare _____ lbs.
Fees _____ Net Wt. _____ lbs.
Driver On Off _____ Net Bush _____
Weigher _____

Project # 6536.04
Sandoval Zinc

Phones: 330-758-0841
800-462-9365 MARIETTA, OHIO
800-633-9365 PERRYSBURG, OHIO
800-262-9365 YOUNGSTOWN, OHIO
FAX: 1-330-758-0786

R & J Trucking
8063 SOUTHERN BLVD.
P.O. BOX 9454
YOUNGSTOWN, OHIO 44513
Radio Dispatched Bulk Commodity Haulers

862183

RECEIVER International Zinc Corp. #H58486						Driver Loading	
CITY/STATE Monaca, PA						Driver Unloading	
SHIPPER EPA (Remed Environmental) Proj. #E0036.04						Truck Owner	
CITY/STATE Andover, IL.						Commodity Zinc Oxide	
SHIP ORIGIN S. ...						Gross 2 10	Truck # 27
SHIP DESTINATION 100 ...						Tare 30	Bill of Lading #
						Net 50	Scale Ticket
DETENTION	LOAD TIME	IN AM <input type="checkbox"/> PM <input type="checkbox"/>	OUT AM <input type="checkbox"/> PM <input type="checkbox"/>	UNLOAD TIME	IN AM <input type="checkbox"/> PM <input type="checkbox"/>	OUT AM <input type="checkbox"/> PM <input type="checkbox"/>	SIGNATURE
RECEIVED EVE MATERIAL GOOD CONDITION							COMMENTS:
BY _____ DATE _____ SIGN FULL NAME							

APPENDIX E
HAZARDOUS WASTE MANIFESTS -- PEORIA DISPOSAL

PLEASE TYPE

(Form designed for use on elite (12-pitch) typewriter.)

EPA Form 8700-22 (Rev. 6-89)

Form Approved, OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No.

2. Page 1 of

Information in the shaded areas is not required by Federal law, but is required by Illinois law.

3. Generator's Name and Mailing Address

Location If Different

A. Illinois Manifest Document Number
FEE PAID IF APPLICABLE

ILLINOIS EPA
ROB JENKINS

SMELTER RD & HIGHWAY 51
SANDOVAL, IL 62882

IL 7804610
B. Generator's IL ID Number 210500002

4. 24 HOUR EMERGENCY AND SPILL ASSISTANCE NUMBERS 618-247-3645

5. Transporter 1 Company Name

6. US EPA ID Number

C. Transporter's ID Number

Midwest Sanitary Service

IL0053980276

D. Transporter's Phone (618) 254-6171

7. Transporter 2 Company Name

8. US EPA ID Number

E. Transporter's ID Number

9. Designated Facility Name and Site Address

10. US EPA ID Number

F. Transporter's Phone ()

PDC #1
4349 SOUTHPORT ROAD
PEORIA, IL 61615

ILD 000 805 812

G. Facility's IL ID Number 1438120003

H. Facility's Phone (309) 676-4893

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)

12. Containers

13. Total Quantity

14. Unit Wt/Vol

1. Waste No.

a. RQ, HAZARDOUS WASTE SOLID, NOS, 9, NA3077, PGIII, (D008)

No. Type

6. 6.

6.

EPA HW Number

001 DT 00025

Y

000327

EPA HW Number

b.

c.

d.

J. Additional Description for Materials Listed Above

FUEL OIL CONTAMINATED ZINC PROCESSING WASTE
WMDS #22123

K. Handling Codes for Wastes Listed Above
In Item #14

15. Special Handling Instructions and Additional Information

NAERG = 171 (ATTACHED)

24 HR. EMG. #

(box) UPW-0448016-04

Quadrant # 4A DJH

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name

Signature

Date

PRINTED NAME IEPA/Rob Jenkins

Signature

Month Day Year
12 04 98

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Date

Don Crofchett

Signature

Month Day Year
12 04 98

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Date

Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.

Date

Printed/Typed Name

Signature

Date

David J Hansen II

Signature

Month Day Year
12 04 98

Emergency Response at 217/782-7860 and the National Response Center at 800/424-8802 or 202/426-2675.



(34)

P.O. BOX 19276

SPRINGFIELD, ILLINOIS 62794-9276 (217) 782-6761

FOR SHIPMENT OF HAZARDOUS
AND SPECIAL WASTE

State Form LPC 62 8/81

IL532-0610

PLEASE TYPE

(Form designed for use on elite (12-pitch) typewriter.)

EPA Form 8700-22 (Rev. 6-89)

Form Approved OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. ILD053980454	Manifest Document No. 002	2. Page 1 of 1	Information in the shaded areas is not required by Federal law, but is required by Illinois law.
3. Generator's Name and Mailing Address ILLINOIS EPA ROB JENKINS		Location If Different SMELTER RD & HIGHWAY 51 SANDOVAL, IL 62882		A. Illinois Manifest Document Number IL 7804611 FEE PAID IF APPLICABLE	
4. *24 HOUR EMERGENCY AND SPILL ASSISTANCE NUMBERS* 618-247-3645		6. US EPA ID Number 24 ILD053980276		B. Generator's IL ID Number 1210500002	
5. Transporter 1 Company Name Midwest Sanitary Service		8. US EPA ID Number		C. Transporter's ID Number See box 156	
7. Transporter 2 Company Name		10. US EPA ID Number		D. Transporter's Phone (618) 254-0171	
9. Designated Facility Name and Site Address PDC #1 4349 SOUTHPORT ROAD PEORIA, IL 61615		11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number) a. RQ, HAZARDOUS WASTE SOLID, NOS, 9, NA3077, PGIII, (D008)		E. Transporter's ID Number	
				F. Transporter's Phone ()	
				G. Facility's IL ID Number 1438120003	
				H. Facility's Phone (309) 676-4893	
		12. Containers No. Type		13. Total Quantity	
		14. Unit Wt/Vol		15. Waste No.	
		16. EPA HW Number		17. EPA HW Number	
		18. EPA HW Number		19. EPA HW Number	
		20. EPA HW Number		21. EPA HW Number	
J. Additional Description for Materials Listed Above FUEL OIL CONTAMINATED ZINC PROCESSING WASTE WMDS #22123		K. Handling Codes for Wastes Listed Above In Item #14			
15. Special Handling Instructions and Additional Information NAERG = 171 (ATTACHED) 24 HR. EMG. # (box C) UPW-0448016-044 Quadrant 3A + 4B DCH					
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.					
Printed/Typed Name PRINTED NAME IEPA / Rob Jenkins		Signature [Signature]		Date Month Day Year 12 04 98	
17. Transporter 1 Acknowledgement of Receipt of Materials		Signature [Signature]		Date Month Day Year 12 04 98	
18. Transporter 2 Acknowledgement of Receipt of Materials		Signature [Signature]		Date Month Day Year 12 04 98	
19. Discrepancy Indication Space					
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.				Date Month Day Year 12 04 98	
Printed/Typed Name David J Hansen II		Signature [Signature]		Date Month Day Year 12 04 98	

This Agency is authorized to require, pursuant to Illinois Revised Statute, 1989, Chapter 111 1/2, Section 1004 and 1021, that this information be submitted to the Agency. Failure to provide this information may result in a civil penalty against the owner or operator not to exceed \$25,000 per day of violation. Falsification of this information may result in a fine up to \$50,000 per day of violation and imprisonment up to 5 years. This form has been approved by the Forms Management Center.

COPY 1. TSD MAIL TO GENERATOR



STATE OF ILLINOIS

P.O. BOX 19276

SPRINGFIELD, ILLINOIS 62794-9276 (217) 782-6761

FOR SHIPMENT OF HAZARDOUS
AND SPECIAL WASTE

State Form LPC 62 8/81

IL532-0610

PLEASE TYPE

(Form designed for use on ekté (12-pitch) typewriter.)

EPA Form 8700-22 (Rev. 6-89)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No.		Manifest Document No.		2. Page 1 of		Information in the shaded areas is not required by Federal law, but is required by Illinois law.	
3. Generator's Name and Mailing Address ILLINOIS EPA ROB JENKINS		Location If Different SMELTER RD & HIGHWAY 51 SANDOVAL, IL 62882		6. US EPA ID Number 618-247-3545		A. Illinois Manifest Document Number IL 7804613		FEE PAID IF APPLICABLE	
4. *24 HOUR EMERGENCY AND SPILL ASSISTANCE NUMBERS		5. Transporter 1 Company Name Midwest Sanitary Service		6. US EPA ID Number IL D053980276		B. Generator's IL ID Number 1210500002		C. Transporter's ID Number Se 0028 154	
7. Transporter 2 Company Name		8. US EPA ID Number		9. Designated Facility Name and Site Address PDC #1 4349 SOUTHPORT ROAD PEORIA, IL 61615		10. US EPA ID Number ILD 000 805 812		D. Transporter's Phone (618) 254-0171	
11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)		12. Containers No. Type		13. Total Quantity		14. Unit Wt/Vol		E. Transporter's ID Number	
a. RD, HAZARDOUS WASTE SOLID, NRG, 9, NA3077, PGIII, (D008)		00.1 RT		00.025 Y		L		F. Transporter's Phone ()	
b.								G. Facility's IL ID Number 1438120003	
c.								H. Facility's Phone ()	
d.								I. Waste No. EPA HW Number D 008 000327	
J. Additional Description for Materials Listed Above FUEL OIL CONTAMINATED ZINC PROCESSING WASTE WMDS #22123		K. Handling Codes for Wastes Listed Above In Item #14							
15. Special Handling Instructions and Additional Information NAERG = 171 (ATTACHED) 24 HR. EMG. #		(box) UPW-0448016-044		Quadrant # 3A, 4B, 2A					
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.		Printed/Typed Name IEPA/Rob Jenkins		Signature Rob Jenkins		Date Month Day Year 12 04 98			
17. Transporter 1 Acknowledgement of Receipt of Materials		Printed/Typed Name David Woolsey		Signature David Woolsey		Date Month Day Year 12 04 98			
18. Transporter 2 Acknowledgement of Receipt of Materials		Printed/Typed Name		Signature		Date Month Day Year			
19. Discrepancy Indication Space									
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.		Printed/Typed Name David J Hansen II		Signature David J Hansen II		Date Month Day Year 12-04-98			

This Agency is authorized to require, pursuant to Illinois Revised Statute, 1989, Chapter 111 1/2, Section 1004 and 1021, that this information be submitted to the Agency. Failure to provide this information may result in a civil penalty against the owner or operator not to exceed \$25,000 per day of violation. Falsification of this information may result in a fine up to \$50,000 per day of violation and imprisonment up to 5 years. This form has been approved by the Forms Management Center.

COPY 1. TSD MAIL TO GENERATOR



RELEASE TYPE

(Form designed for use on elite (12-pitch) typewriter)

EPA Form 8700-22 (Rev. 6-89)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS
WASTE MANIFEST

1. Generator's US EPA ID No.

ILD053980454

Manifest
Document No.
009

2. Page 1

of 1

Information in the shaded areas is not
required by Federal law, but is required by
Illinois law.

3. Generator's Name and Mailing Address

ILLINOIS EPA

ROB JENKINS Grids 29, 1A

Location If Different

SMELTER RD & HIGHWAY 51

SANDOVAL, IL 62882

618-247-3645

A. Illinois Manifest Document Number

IL 7804614

FEE PAID

IF APPLICABLE

B. Generator's ID Number 1 2 1 0 5 0 0 0 0 2

4. 24 HOUR EMERGENCY AND SPILL ASSISTANCE NUMBERS

5. Transporter 1 Company Name

Midwest Sanitary Service

6. US EPA ID Number

ILD053980276

C. Transporter's
ID Number

See box 152: 0028

D. Transporter's Phone (618) 254-0171

E. Transporter's
ID Number

F. Transporter's Phone ()

G. Facility's IL
ID Number 1 4 3 8 1 2 0 0 0 3

H. Facility's Phone (309 676-4893

9. Designated Facility Name and Site Address

PDC #1

4349 SOUTHPORT ROAD

PEDRIA, IL 61615

10. US EPA ID Number

ILD 000 805 812

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)

a. RG, HAZARDOUS WASTE SOLID, NOS, 9, NA3077,
PGIII, (D008)

12. Containers

No.

Type

13.
Total
Quantity14.
Unit
Wt/VolI.
Waste No.

EPA HW Number

001 DT 00,0254 000327

EPA HW Number

EPA HW Number

EPA HW Number

J. Additional Description for Materials Listed Above

FUEL OIL CONTAMINATED ZINC PROCESSING WASTE
WMDS #22123K. Handling Codes for Wastes Listed Above
In Item #14

15. Special Handling Instructions and Additional Information

NAERG = 171 (ATTACHED)

24 HR. EMG. #

(box) UPW - 0448016-046

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name

PRINTED NAME IEPA/Rob Jenkins

Signature

Rob Jenkins

Date

Month Day Year

12 07 98

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

Don Crotchett

Signature

Don Crotchett

Date

Month Day Year

12 07 98

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.

Date

Printed/Typed Name

Lisa Stodier

Signature

Lisa Stodier

Month Day Year

12 07 98



STATE OF ILLINOIS

ENVIRONMENTAL PROTECTION AGENCY DIVISION OF LAND POLLUTION CONTROL

P.O. BOX 19276

SPRINGFIELD, ILLINOIS 62794-9276 (217) 782-6761

FOR SHIPMENT OF HAZARDOUS
AND SPECIAL WASTE

PLEASE TYPE

(Form designed for use on elite (12-pitch) typewriter.)

State Form LPC 62 8/81

IL532-0610

EPA Form 8700-22 (Rev. 6-89)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS
WASTE MANIFEST

1. Generator's US EPA ID No.

ILD053980454

Manifest
Document No.
005

2. Page 1

Information in the shaded areas is not
required by Federal law, but is required by
Illinois law

3. Generator's Name and Mailing Address

ILLINOIS EPA

ROB JENKINS

Location If Different

SMELTER RD & HIGHWAY 51

SANDOVAL, IL 62882

4. *24 HOUR EMERGENCY AND SPILL ASSISTANCE NUMBERS*

618-247-3645

5. Transporter 1 Company Name

Midwest Sanitary Service

6.

US EPA ID Number

ILD053980454

7. Transporter 2 Company Name

8.

US EPA ID Number

9. Designated Facility Name and Site Address

PDC #1

4349 SOUTHPORT ROAD

PEORIA, IL 61615

10.

US EPA ID Number

ILD 000 805 812

A. Illinois Manifest Document Number

IL 7804615

FEE PAID

IF APPLICABLE

B. Generator's IL

ID Number 112110150101012

C. Transporter's

ID Number

See box 15-0028

D. Transporter's Phone (618) 254-0171

E. Transporter's

ID Number

F. Transporter's Phone ()

G. Facility's IL

ID Number 1438120003

H. Facility's Phone ()

309 676-4893

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)

12. Containers

No.

Type

13. Total

Quantity

14. Unit

Wt/Vol

1. Waste No.

EPA HW Number

EPA HW Number

EPA HW Number

EPA HW Number

a. RQ, HAZARDOUS WASTE SOLID, NOS, 9, NA3077,
PGIII, (D008)

b.

001 DT 0002.5 Y

000327

c.

d.

J. Additional Description for Materials Listed Above

FUEL OIL CONTAMINATED ZINC PROCESSING WASTE
WMDS #22123K. Handling Codes for Wastes Listed Above
In Item #14

15. Special Handling Instructions and Additional Information

NAERG = 171 (ATTACHED)

24 HR. EMG. #

(box) UPW-0616-404-0H

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by
proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway
according to applicable international and national government regulations.If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to
be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present
and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and
select the best waste management method that is available to me and that I can afford.

Printed/Typed Name

PRINTED NAME IEPA/Rob Jenkins

Signature

RLJ

Date

Month Day Year

120798

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

KRIS G. LBS

Signature

Kris LBS

Date

Month Day Year

120798

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Date

Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.

Printed/Typed Name

Lisa S. Rodier

Signature

Lisa S. Rodier

Date

Month Day Year

120798

This Agency is authorized to require, pursuant to Illinois Revised Statute, 1989, Chapter 111 1/2, Section 1004 and 1021, that this information be submitted to the Agency. Failure to provide
this information may result in a civil penalty against the owner or operator not to exceed \$25,000 per day of violation. Falsification of this information may result in a fine up to \$50,000
per day of violation and imprisonment up to 5 years. This form has been approved by the Forms Management Center.

COPY 1. TSD MAIL TO GENERATOR

Emergency response at 217/782-6860 and the National Response Center at 800/424-8802 or 202/426-2675.



STATE OF ILLINOIS

ENVIRONMENTAL PROTECTION AGENCY DIVISION OF LAND POLLUTION CONTROL

P.O. BOX 49276

SPRINGFIELD, ILLINOIS 62794-9276 (217) 782-6761

FOR SHIPMENT OF HAZARDOUS
AND SPECIAL WASTE

State Form LPC 62 8/81

IL532-0610

PLEASE TYPE

(Form designed for use on site (12-pitch) typewriter.)

EPA Form 8700-22 (Rev. 6-89)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. ILD053980454	Manifest Document No. 206	2. Page 1 of 1	Information in the shaded areas is not required by Federal law, but is required by Illinois law.	
3. Generator's Name and Mailing Address ILLINOIS EPA ROB JENKINS Grids 3B, 1B, 1A		Location If Different SMELTER RD & HIGHWAY 51 SANDOVAL, IL 62882 618-247-3645		A. Illinois Manifest Document Number IL 7804616 FEE PAID IF APPLICABLE 1210500002		
4. *24 HOUR EMERGENCY AND SPILL ASSISTANCE NUMBERS*		6. US EPA ID Number 26		B. Generator's IL ID Number 1210500002		
5. Transporter 1 Company Name Midwest Sanitary Service		8. US EPA ID Number ILD053980276		C. Transporter's ID Number See box 15L-0028		
7. Transporter 2 Company Name		8. US EPA ID Number		D. Transporter's Phone (618) 251-0171		
9. Designated Facility Name and Site Address PDC #1 4349 SOUTHPORT ROAD PEORIA, IL 61615		10. US EPA ID Number ILD 000 805 817		E. Transporter's ID Number		
				F. Transporter's Phone ()		
				G. Facility's IL ID Number 1438120003		
				H. Facility's Phone () 309 676-4893		
11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)		12. Containers		13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RG, HAZARDOUS WASTE SOLID, NOS, 9, NA3077, PGIII, (D008)		No. Type				EPA HW Number
		6 001 p. 500,025				000327
b.						EPA HW Number
c.						EPA HW Number
d.						EPA HW Number
J. Additional Description for Materials Listed Above FUEL OIL CONTAMINATED ZINC PROCESSING WASTE WMDS #32123		K. Handling Codes for Wastes Listed Above In Item #14				
15. Special Handling Instructions and Additional Information NAERG = 171 (ATTACHED) (box C) UPW-0616-04-04H. 24 HR. ENG. #						
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.						
Printed/Typed Name PRINTE NAME IEPA/Rob Jenkins		Signature Rob Jenkins		Date Month Day Year 12 07 98		
17. Transporter 1 Acknowledgement of Receipt of Materials		Printed/Typed Name David Woolsey		Signature David Woolsey		Date Month Day Year 12 07 98
18. Transporter 2 Acknowledgement of Receipt of Materials		Printed/Typed Name		Signature		Date Month Day Year
19. Discrepancy Indication Space						
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.						
Printed/Typed Name Lisa S. Rodier		Signature Lisa S. Rodier		Date Month Day Year 12 07 98		

This Agency is authorized to require, pursuant to Illinois Revised Statute, 1989, Chapter 111 1/2, Section 1004 and 1021, that this information be submitted to the Agency. Failure to provide this information may result in a civil penalty against the owner or operator not to exceed \$25,000 per day of violation. Falsification of this information may result in a fine up to \$50,000 per day of violation and imprisonment up to 5 years. This form has been approved by the Forms Management Center.

COPY 1. TSD MAIL TO GENERATOR

This document is a copy of a document received at 2/11/82-7860 and the National Response Center at 800/424-8802 or 202/426-2675.



PLEASE TYPE

(Form designed for use on elite (12-pitch) typewriter.)

EPA Form 8700-22 (Rev. 6-89)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of 1	Information in the shaded areas is not required by Federal law, but is required by Illinois law.
3. Generator's Name and Mailing Address ILLINOIS EPA ROB JENKINS <i>Grids 2C, 4C, 3B</i>		Location If Different SMELTER RD & HIGHWAY 51 SANDOVAL, IL 62882		A. Illinois Manifest Document Number FEE PAID IF APPLICABLE IL 7804617	
4. 24 HOUR EMERGENCY AND SPILL ASSISTANCE NUMBERS 618-247-3645		6. US EPA ID Number ILD053980454		B. Generator's IL ID Number 1 2 1 0 5 0 0 0 0 2	
5. Transporter 1 Company Name Midwest Sanitary Service		8. US EPA ID Number ILD053980278		C. Transporter's ID Number UPW-0448016-04	
7. Transporter 2 Company Name		8. US EPA ID Number		D. Transporter's Phone (618) 254-0171	
9. Designated Facility Name and Site Address PDC #1 4349 SOUTHPORT ROAD PEORIA, IL 61615		10. US EPA ID Number ILD 000 805 812		E. Transporter's ID Number	
				F. Transporter's Phone ()	
				G. Facility's IL ID Number 1 4 3 8 1 2 0 0 0 3	
				H. Facility's Phone () 309 676-4893	
11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)		12. Containers	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ, HAZARDOUS WASTE SOLID, NOS, 9, NA3077, PGIII, (D008)		No. 6	Type	6	EPA HW Number D 0 0 8
b.					EPA HW Number 0 0 0 3 2 7
c.					EPA HW Number
d.					EPA HW Number
J. Additional Description for Materials Listed Above FUEL OIL CONTAMINATED ZINC PROCESSING WASTE WMDS #22123		K. Handling Codes for Wastes Listed Above In Item #14			
15. Special Handling Instructions and Additional Information NAERG = 171 (ATTACHED) 24 HR. EMG. #					
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.					
Printed/Typed Name PRINTER NAME IEPA/Rob Jenkins		Signature <i>Rob Jenkins</i>		Date Month Day Year 1 2 0 8 9 8	
17. Transporter 1 Acknowledgement of Receipt of Materials		Signature <i>Don C. Cretchett</i>		Date Month Day Year 1 2 0 8 9 8	
Printed/Typed Name Don Cretchett		Signature		Date	
18. Transporter 2 Acknowledgement of Receipt of Materials		Signature		Date	
Printed/Typed Name		Signature		Date	
19. Discrepancy Indication Space					
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.					
Printed/Typed Name Lisa S. Rodier		Signature <i>Lisa S. Rodier</i>		Date Month Day Year 2 0 0 8 9 8	



PLEASE TYPE

(Form designed for use on elite (12-pitch) typewriter.)

EPA Form 8700-22 (Rev. 6-89)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of 1	Information in the shaded areas is not required by Federal law, but is required by Illinois law.
3. Generator's Name and Mailing Address ILLINOIS EPA ROB JENKINS Grids 2C, 4C, 3B SMELTER RD & HIGHWAY 51 SANDOVAL, IL 62882		Location If Different TLD053980454		A. Illinois Manifest Document Number IL 7804625 FEE PAID IF APPLICABLE	
4. *24 HOUR EMERGENCY AND SPILL ASSISTANCE NUMBERS* 618-247-3645		6. US EPA ID Number 618-247-3645		B. Generator's IL ID Number 1 2 1 0 5 0 0 0 0 2	
5. Transporter 1 Company Name Midwest Sanitary Service		8. US EPA ID Number TLD053980276		C. Transporter's ID Number See box 20028	
7. Transporter 2 Company Name		8. US EPA ID Number		D. Transporter's Phone (618) 254-0171	
9. Designated Facility Name and Site Address PDC #1 4349 SOUTHPORT ROAD PEORIA, IL 61615		10. US EPA ID Number TLD 000 805 812		E. Transporter's ID Number	
				F. Transporter's Phone ()	
				G. Facility's IL ID Number 1 4 3 8 1 2 0 0 0 3	
				H. Facility's Phone () 309 676-4893	
11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)		12. Containers No.	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ, HAZARDOUS WASTE SOLID, NOS, 9, NA3077, PGIII, (D008)		6		6	EPA HW Number D 0 0 8
b.					EPA HW Number 0 0 0 3 2 7
c.					EPA HW Number
d.					EPA HW Number
J. Additional Description for Materials Listed Above FUEL OIL CONTAMINATED ZINC PROCESSING WASTE WMDS #22123		K. Handling Codes for Wastes Listed Above In Item #14			
15. Special Handling Instructions and Additional Information NAERG = 171 (ATTACHED) 24 HR. EMG. # (box C) UPW-04480160H L.					
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.					
Printed/Typed Name PRINTED NAME IEPA/Rob Jenkins		Signature Rob Jenkins		Date Month Day Year 12 08 98	
17. Transporter 1 Acknowledgement of Receipt of Materials		Signature KRIS C. BBS		Date Month Day Year 12 08 98	
18. Transporter 2 Acknowledgement of Receipt of Materials		Signature		Date Month Day Year	
19. Discrepancy Indication Space					
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.		Signature Lisa S. Forcier		Date Month Day Year 12 08 98	

Emergency Response at 217 / 782-7860 and the National Response Center at 800 / 424-8802 or 202 / 426-2675.



PLEASE TYPE

(Form designed for use on elite (12-pitch) typewriter.)

EPA Form 8700-22 (Rev. 6-89)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS
WASTE MANIFEST

1. Generator's US EPA ID No.

ILD053980454

Manifest
Document No.

009

2. Page 1
of 1Information in the shaded areas is not
required by Federal law, but is required by
Illinois law.

3. Generator's Name and Mailing Address

ILLINOIS EPA

ROB JENKINS Grids 2C, 4C, 3B

Location If Different

SMELTER RD & HIGHWAY 51

SANDOVAL, IL 62882

4. "24 HOUR EMERGENCY AND SPILL ASSISTANCE NUMBERS" 618-247-3645

5. Transporter 1 Company Name

Midwest Sanitary Service

6. US EPA ID Number

ILD053980278

7. Transporter 2 Company Name

8. US EPA ID Number

9. Designated Facility Name and Site Address

PDC #1

4349 SOUTHPORT ROAD

PEORIA, IL 61615

10. US EPA ID Number

ILD 000 805 812

A. Illinois Manifest Document Number

IL 7804626

FEE PAID
IF APPLICABLEB. Generator's IL
ID Number

1 2 1 0 5 0 0 0 0 2

C. Transporter's
ID NumberSee box
1560028

D. Transporter's Phone (618) 254-0171

E. Transporter's
ID Number

F. Transporter's Phone ()

G. Facility's IL
ID Number

1 4 3 8 1 2 0 0 0 3

H. Facility's Phone (309 676-4893

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)

12. Containers

No.

Type

13.
Total
Quantity14.
Unit
Wt/VolI.
Waste No.

EPA HW Number

a. RD, HAZARDOUS WASTE SOLID, NOS, 9, NA3077,
PGIII, (D008)

u.

001 DT 000.254

u.

D 0008

EPA HW Number

000327

b.

c.

d.

EPA HW Number

EPA HW Number

J. Additional Description for Materials Listed Above

FUEL OIL CONTAMINATED ZINC PROCESSING WASTE
WMDS #22123K. Handling Codes for Wastes Listed Above
in Item #14

15. Special Handling Instructions and Additional Information

NAERG = 171 (ATTACHED)

24 HR. EMG. #

(box) UPW-0448016-OHw.

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by
proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway
according to applicable international and national government regulations.If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to
be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present
and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and
select the best waste management method that is available to me and that I can afford.

Printed/Typed Name

PRINTED NAME IEPA / Rob Jenkins

Signature

Date

Month Day Year

12 08 98

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

David Woolsey

Signature

Date

Month Day Year

12 08 98

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Date

Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.

Date

Printed/Typed Name

Lisa S. Todier

Signature

Month Day Year

12 08 98

APPENDIX F
HAZARDOUS WASTE MANIFESTS -- MICHIGAN



WASTE MANAGEMENT DIVISION
MICHIGAN DEPARTMENT OF
ENVIRONMENTAL QUALITY

ATT. ☐ DIS. ☐ REJ. ☐ PR. ☐

Required under authority of Part 1
Part 121 of Act 451, 1994, as amended.
Failure to file may subject you to
criminal and/or civil penalties under
Sections 324.11151 or 324.12116 MCL.

Please print or type.

Form Approved OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. ILD 053 980 454	Manifest Document No. 002	2. Page 1 of 1	Information in the shaded area is not required by Federal law.
3. Generator's Name and Mailing Address ILLINOIS EPA/SANDOVAL ZINC SITE Grids 1C, 2B, 3C 1733 S. VADEVENTER; ST. LOUIS, MO 63110 314 772-2326 ATTN: HENRY STREMLAU				A. State Manifest Document Number MI 7625913	
4. Generator's Phone ()				B. State Generator's ID	
5. Transporter 1 Company Name Midwest Sanitary Service				C. State Transporter's ID 0028	
6. US EPA ID Number ILD053980454				D. Transporter's Phone 618-254-01	
7. Transporter 2 Company Name				E. State Transporter's ID	
8. US EPA ID Number				F. Transporter's Phone	
9. Designated Facility Name and Site Address MICHIGAN DISPOSAL WASTE TREATMENT PLANT 49350 N. I-94 SERVICE DRIVE BELLEVILLE, MI 48111				G. State Facility's ID	
10. US EPA ID Number MID000724831				H. Facility's Phone 800 592-5489	
11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID NUMBER). HM			12. Containers No. Type	13. Total Quantity	14. Unit Wt/Vol
a. X HAZARDOUS WASTE SOLID, NOS, 9, NA3077 PG III, RQ (D008)			1 DT	16	25 TDMS
b.					D008
c.					
d.					
J. Additional Descriptions for Materials Listed Above					K. Handling Code
11A. FUEL OIL / ZINC PROCESSING WASTE EQ NUMBER: 120998MC; ACCT. NO: 1702					a.
					b.
					c.
					d.
15. Special Handling Instructions and Additional Information NAERG = 171 (COPY ATTACHED)					
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulation. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR: if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.					
Printed/Typed Name IEPA / JAMES R. JENKINS			Signature James R. Jenkins		Date 1/2/15/9
17. Transporter 1 Acknowledgement of Receipt of Materials			Signature David Woolsey		Date 1/2/15/9
Printed/Typed Name David Woolsey			Signature		Date
18. Transporter 2 Acknowledgement of Receipt of Materials			Signature		Date
Printed/Typed Name			Signature		Date
19. Discrepancy Indication Space X mtl received 37840lbs @ 16T per Ench Smith & Peoria J-L 12/16/98					
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.			Signature Christina Hood		Date 1/2/16/9
Printed/Typed Name Christina Hood			Signature		Date

ALL SPILLS MUST BE REPORTED TO THE MICHIGAN POLLUTION EMERGENCY ALERTING SYSTEM, IN MICHIGAN AT 1 800 242-4706 OR OUT OF STATE AT 517-373-7660 AND THE NATIONAL RESPONSE CENTER AT 1 800 424-9002 24 HOURS PER DAY.



WASTE MANAGEMENT DIVISION
MICHIGAN DEPARTMENT OF
ENVIRONMENTAL QUALITY

4-100-1000-1000-1000

DO NOT WRITE IN THIS SPACE

ATT. ☐ DIS. ☐ REJ. ☐ PR. ☐

Required under authority of Part 1
Part 121 of Act 451, 1994, as amended

Failure to file may subject you to
criminal and/or civil penalties under
Sections 324.11151 or 324.12116 M

Please print or type.

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of 1	Information in the shaded area is not required by Federal law.	
3. Generator's Name and Mailing Address ILLINOIS EPA/SANDOVAL ZINC SITE 1733 S. VADEVENTER; ST. LOUIS, MO 63110		4. Generator's Phone (314) 772-2326 ATTN: HENRY STREMLAU		A. State Manifest Document Number MI 7625914		
5. Transporter 1 Company Name Midwest Sanitary Service		6. US EPA ID Number ILD053980454		B. State Generator's ID		
7. Transporter 2 Company Name		8. US EPA ID Number		C. State Transporter's ID		
9. Designated Facility Name and Site Address MICHIGAN DISPOSAL WASTE TREATMENT PLANT 49350 N. I-94 SERVICE DRIVE BELLEVILLE, MI 48111		10. US EPA ID Number MID000724831		D. Transporter's Phone 618-254-0100		
				E. State Transporter's ID 0028		
				F. Transporter's Phone		
				G. State Facility's ID		
				H. Facility's Phone 800 592-5489		
11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID NUMBER)		12. Containers No.	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.	
a. X HAZARDOUS WASTE SOLID, NOS, 9, NA3077 PG III, RQ (D008)		1	DT	25 Tons	D008	
b.						
c.						
d.						
J. Additional Descriptions for Materials Listed Above					K. Handling Code	
11A. FUEL OIL / ZINC PROCESSING WASTE EQ NUMBER: 120998MC; ACCT. NO: 1702					a.	
					b.	
					c.	
					d.	
15. Special Handling Instructions and Additional Information NAERG = 171 (COPY ATTACHED)						
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.						
Printed/Typed Name IEPA / JAMES R. JENKINS		Signature James R. Jenkins		Date 12/15/98		
17. Transporter 1 Acknowledgement of Receipt of Materials		Signature John Gasperoni		Date 12/15/98		
Printed/Typed Name John Gasperoni		Signature		Date		
18. Transporter 2 Acknowledgement of Receipt of Materials		Signature		Date		
Printed/Typed Name		Signature		Date		
19. Discrepancy Indication Space						
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.						
Printed/Typed Name Duane Jones		Signature Duane Jones		Date 12/16/98		

ALL SPILLS MUST BE REPORTED TO THE MICHIGAN POLLUTION EMERGENCY ALERTING SYSTEM, IN MICHIGAN AT 1-800-292-4706 OR OUT OF STATE AT 517-373-7660 AND THE NATIONAL RESPONSE CENTER AT 1-800-424-8002 24 HOURS PER DAY.



WASTE MANAGEMENT DIVISION
MICHIGAN DEPARTMENT OF
ENVIRONMENTAL QUALITY

UNIFORM HAZARDOUS WASTE MANIFEST

DO NOT WRITE IN THIS SPACE

ATT. ☐ DIS. ☐ REJ. ☐ PR. ☐

Required under authority of Part 11
Part 121 of Act 451, 1994, as amended

Failure to file may subject you to
criminal and/or civil penalties under
Sections 324.11151 or 324.12116 MCL

Please print or type.

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. ILD 053 980 454		Manifest Document No. 001		2. Page 1 of 1		Information in the shaded area is not required by Federal law.			
3. Generator's Name and Mailing Address ILLINOIS EPA/SANDOVAL ZINC SITE Gr. ds 1C, 2B, 3C, 1733 S. VADEVENTER; ST. LOUIS, MO 63110						A. State Manifest Document Number MI 7625912					
4. Generator's Phone (314) 772-2326 ATTN: HENRY STREMLAU						B. State Generator's ID					
5. Transporter 1 Company Name Midwest Sanitary Service						6. US EPA ID Number ILDO 5398027		C. State Transporter's ID 0028			
7. Transporter 2 Company Name						8. US EPA ID Number		D. Transporter's Phone 618-254-01			
9. Designated Facility Name and Site Address MICHIGAN DISPOSAL WASTE TREATMENT PLANT 49350 N. I-94 SERVICE DRIVE BELLEVILLE, MI 48111						10. US EPA ID Number MID000724831		E. State Transporter's ID			
								F. Transporter's Phone			
								G. State Facility's ID			
								H. Facility's Phone 800 592-5489			
11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID NUMBER). HM						12. Containers No. Type		13. Total Quantity Unit		14. Waste No. Wt/Vol	
a. X HAZARDOUS WASTE SOLID, NOS, 9, NA3077 PG. III, RQ (D008)						1 DT		* 33 25 TONS		D008	
b.											
c.											
d.											
J. Additional Descriptions for Materials Listed Above										K. Handling Code	
11A. FUEL OIL / ZINC PROCESSING WASTE EQ NUMBER: 120998MC; ACCT. NO: 1702										a.	
										b.	
										c.	
										d.	
15. Special Handling Instructions and Additional Information NAERG = 171 (COPY ATTACHED)											
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.											
Printed/Typed Name IEPA / JAMES R. JENKINS						Signature James R. Jenkins			Date 12/15/98		
17. Transporter 1 Acknowledgement of Receipt of Materials						Signature Chris G. G. G.			Date 12/15/98		
Printed/Typed Name Chris G. G. G.						Signature Chris G. G. G.			Date 12/15/98		
18. Transporter 2 Acknowledgement of Receipt of Materials						Signature			Date		
Printed/Typed Name						Signature			Date		
19. Discrepancy Indication Space * MDI received 68940 lbs @ 3.3 T per Enrich Smith @ Peoria											
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.						Signature Christina Hazel			Date 12/16/98		
Printed/Typed Name Christina Hazel						Signature Christina Hazel			Date 12/16/98		

ALL SPILLS MUST BE REPORTED TO THE MICHIGAN POLLUTION EMERGENCY ALERTING SYSTEM, IN MICHIGAN AT 1-800-202-4706 OR OUT OF STATE AT 517-373-7660 AND THE NATIONAL RESPONSE CENTER AT 1-800-424-0802 24 HOURS PER DAY.



WASTE MANAGEMENT DIVISION
MICHIGAN DEPARTMENT OF
ENVIRONMENTAL QUALITY

DO NOT WRITE IN THIS SPACE
ATT. ☐ DIS. ☐ REJ. ☐ PR. ☐

Required under authority of Part 1
Part 121 of Act 451, 1994, as amended

Failure to file may subject you to
criminal and/or civil penalties under
Sections 324.11151 or 324.12115 MCL

Please print or type

Form Approved OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. ILD 053 980 454		Manifest Document No. 0024		2. Page 1 of 1		Information in the shaded area is not required by Federal law.							
3. Generator's Name and Mailing Address ILLINOIS EPA/SANDOVAL ZINC SITE Grds 15, 20, 30 1733 S. VADEVENTER; ST. LOUIS, MO 63110						A. State Manifest Document Number MI 7625915									
4. Generator's Phone (314) 772-2326 ATTN: HENRY STREMLAU						B. State Generator's ID									
5. Transporter 1 Company Name Midwest Sanitary Service				6. US EPA ID Number ILD053980272		C. State Transporter's ID 0028									
7. Transporter 2 Company Name				8. US EPA ID Number		D. Transporter's Phone 618-254-01									
9. Designated Facility Name and Site Address MICHIGAN DISPOSAL WASTE TREATMENT PLANT 49350 N. I-94 SERVICE DRIVE BELLEVILLE, MI 48111						E. State Transporter's ID									
10. US EPA ID Number MID000724831						F. Transporter's Phone									
11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID NUMBER) HM						12. Containers No. Type		13. Total Quantity		14. Unit Wt/Vol		15. Waste No.			
a. X HAZARDOUS WASTE SOLID, NOS, 9, HA3077 PG III, RQ (D008)						1		DT		25 T		D008			
b.															
c.															
d.															
J. Additional Descriptions for Materials Listed Above												K. Handling Code			
11A. FUEL OIL / ZINC PROCESSING WASTE EQ NUMBER: 120998MC; ACCT. NO: 1702												a.			
												b.			
												c.			
												d.			
15. Special Handling Instructions and Additional Information NAERG = 171 (COPY ATTACHED)															
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.															
Printed/Typed Name IEPA / James R. Jenkins						Signature James R. Jenkins						Date Month Day Year 12/1/79			
17. Transporter 1 Acknowledgement of Receipt of Materials						Printed/Typed Name David W. Woolsey						Signature David W. Woolsey		Date Month Day Year 12/1/79	
18. Transporter 2 Acknowledgement of Receipt of Materials						Printed/Typed Name						Signature		Date Month Day Year	
19. Discrepancy Indication Space															
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.															
Printed/Typed Name D. Jones						Signature D. Jones						Date Month Day Year 12/1/79			

ALL SPILLS MUST BE REPORTED TO THE MICHIGAN POLLUTION EMERGENCY ALERTING SYSTEM, IN MICHIGAN AT 1-800-292-4736 OR OUT OF STATE AT 517-373-7660 AND THE NATIONAL RESPONSE CENTER AT 1-800-424-9002 24 HOURS PER DAY.

GENERATOR

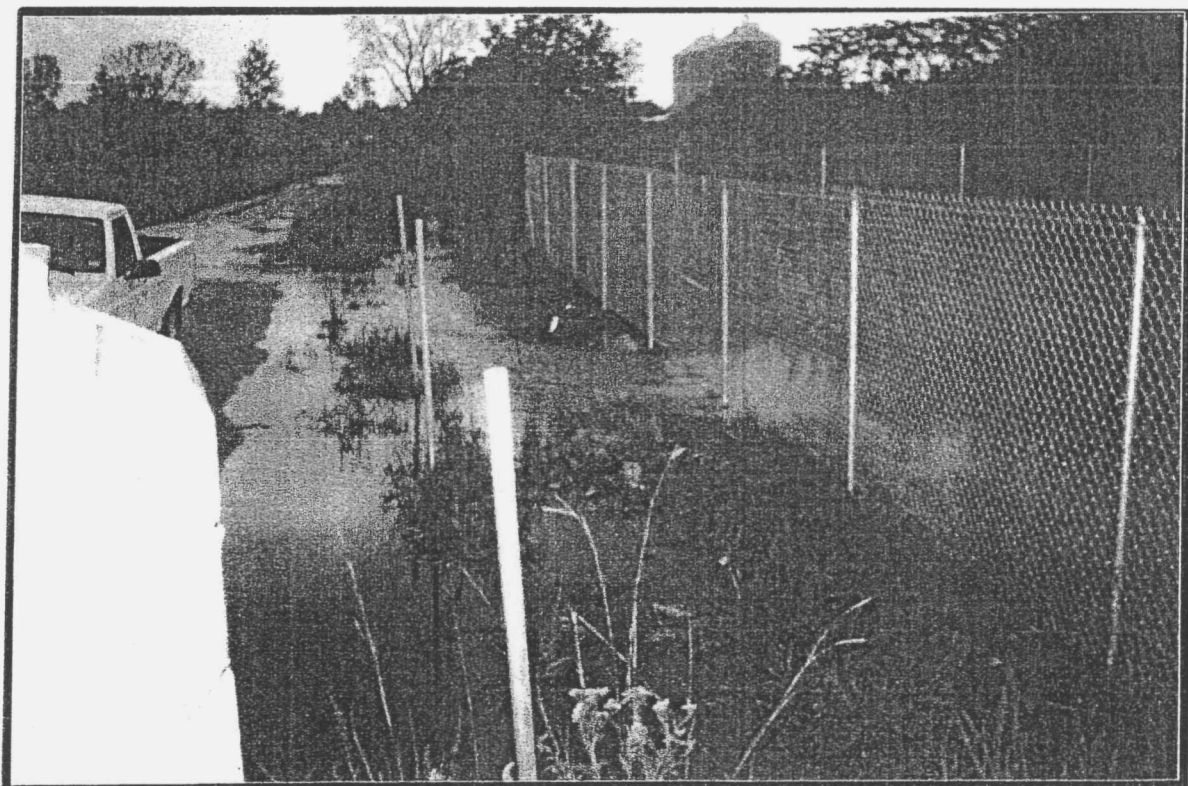
TRANSPORTER

FACILITY

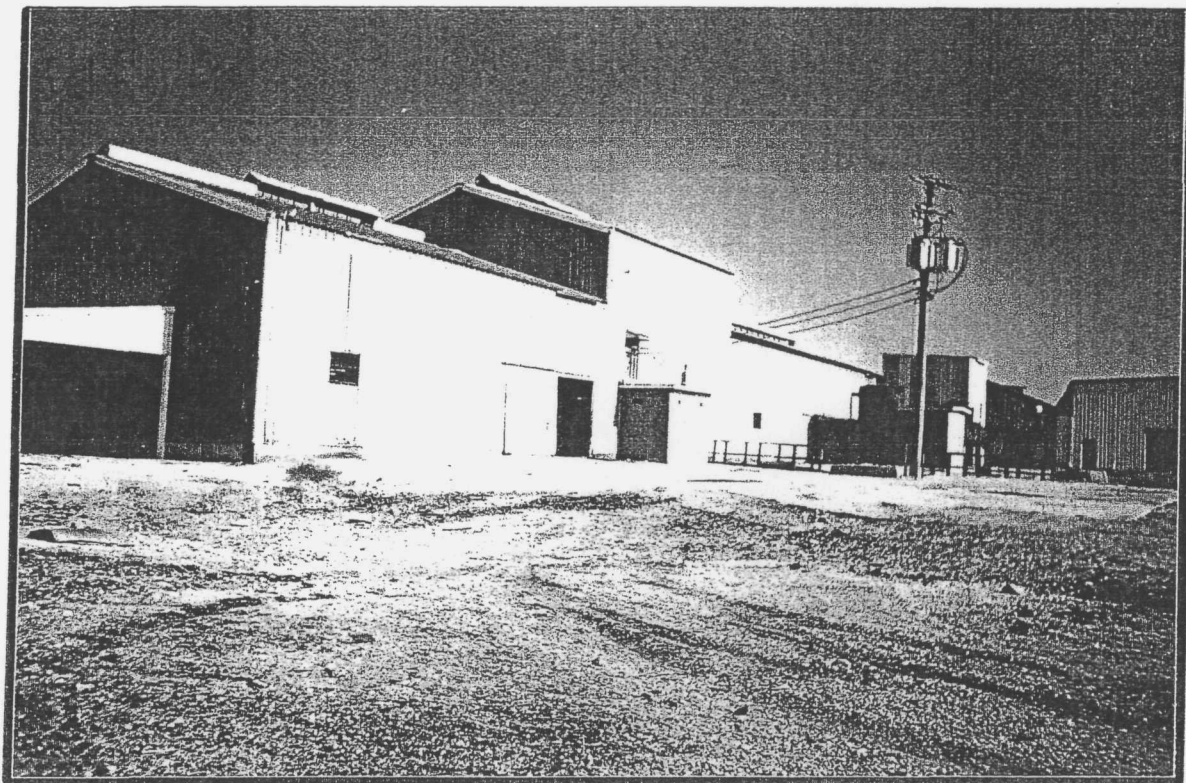
APPENDIX G PHOTO LOG



View of southwest side of site where fence was removed by vandals.



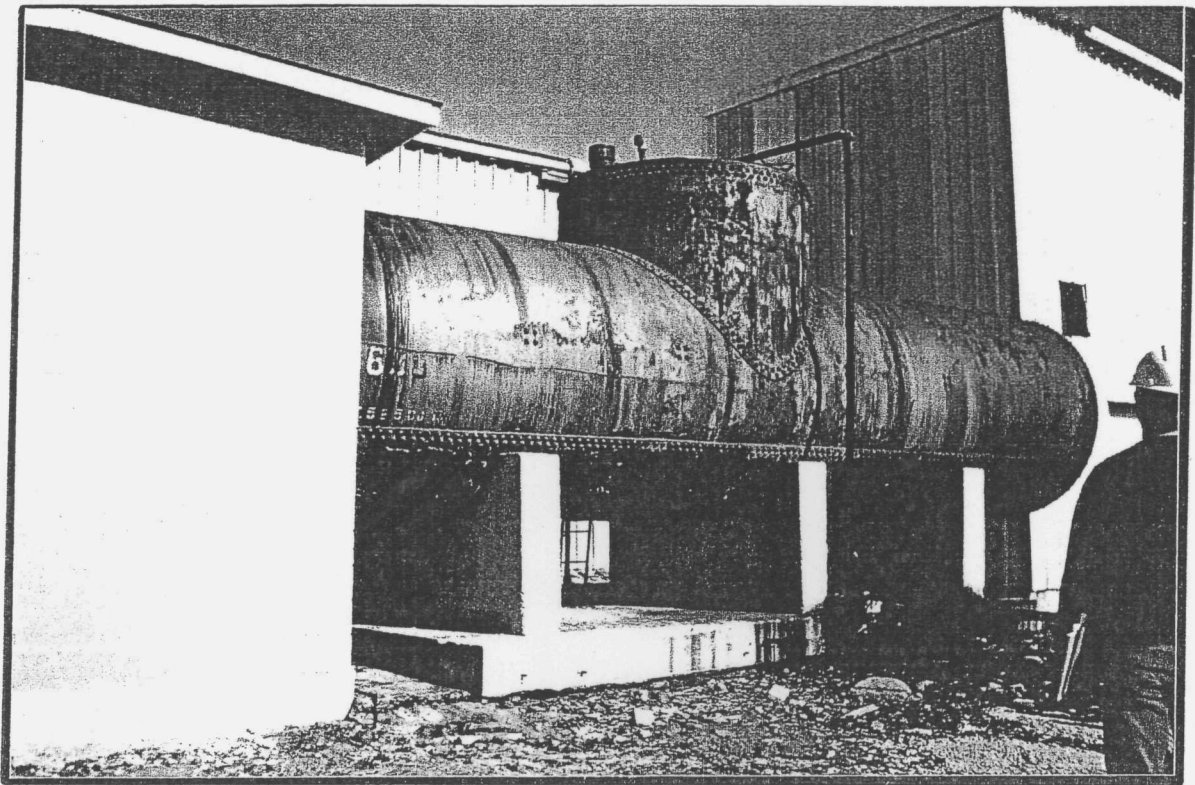
View of new fence on southwest side of site.



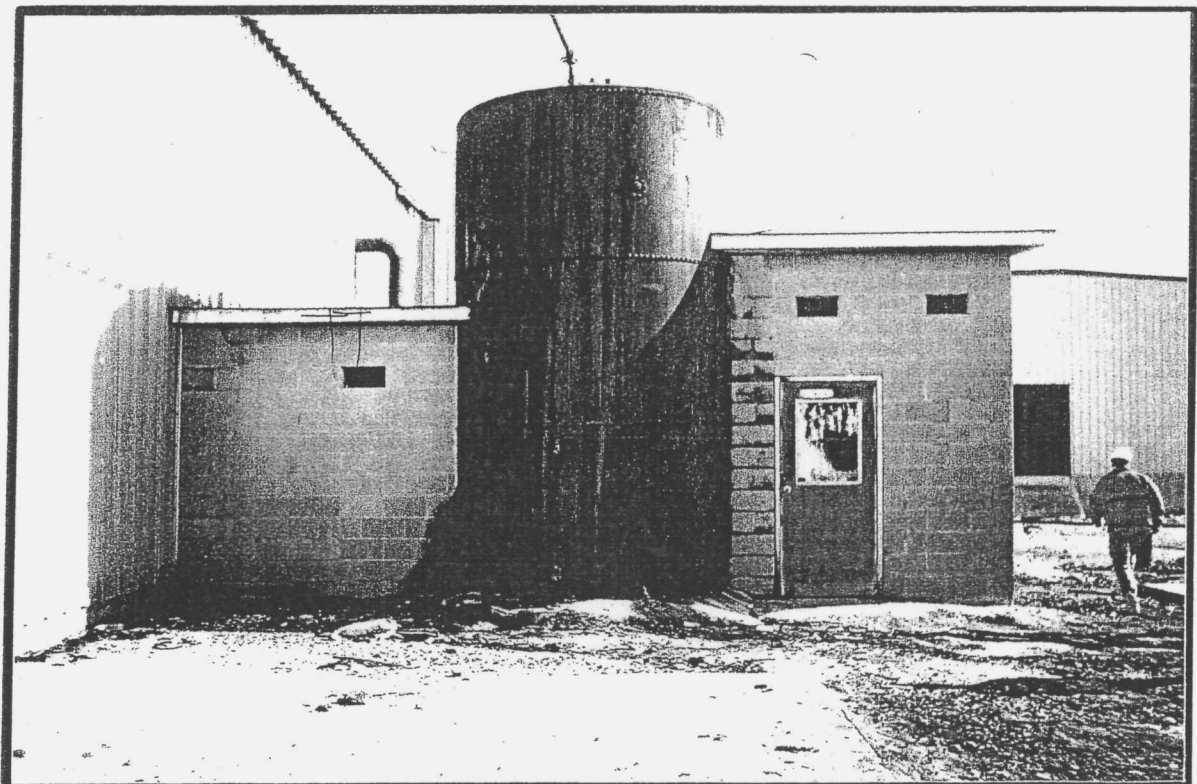
View of southwest side of smelter.



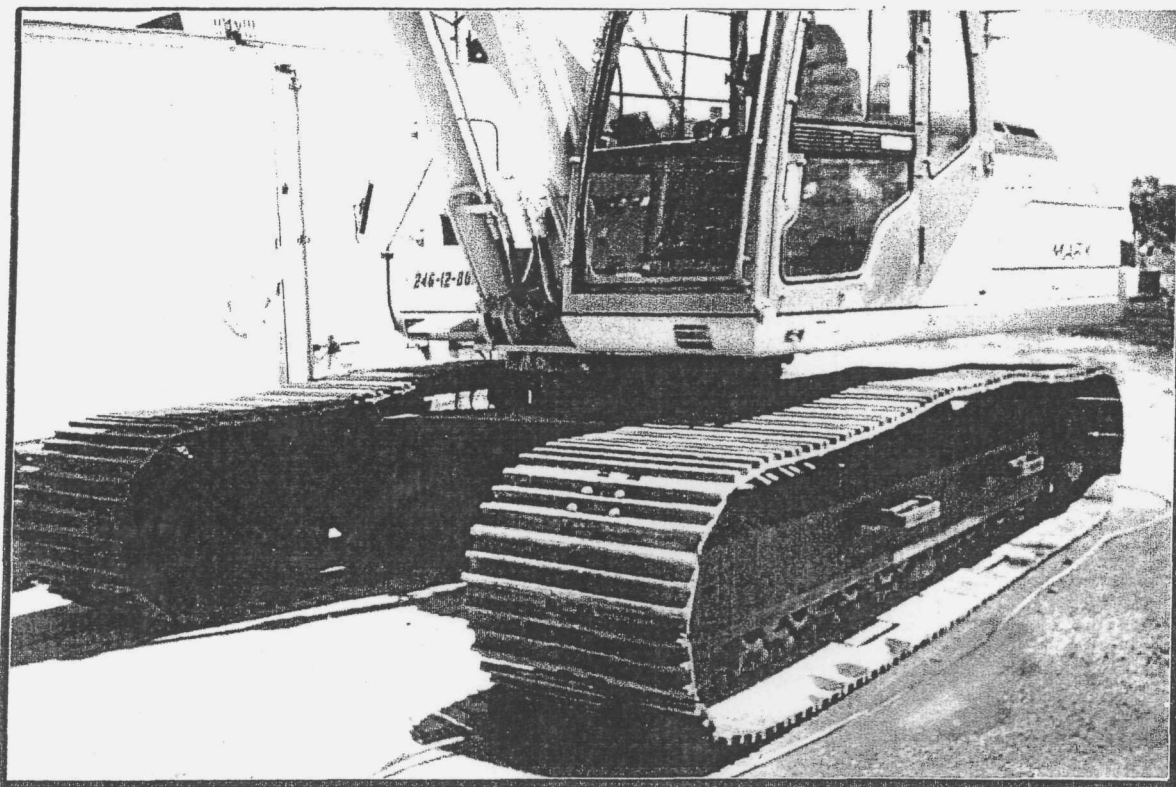
View of northeast side of smelter.



View of fuel oil tank #1.



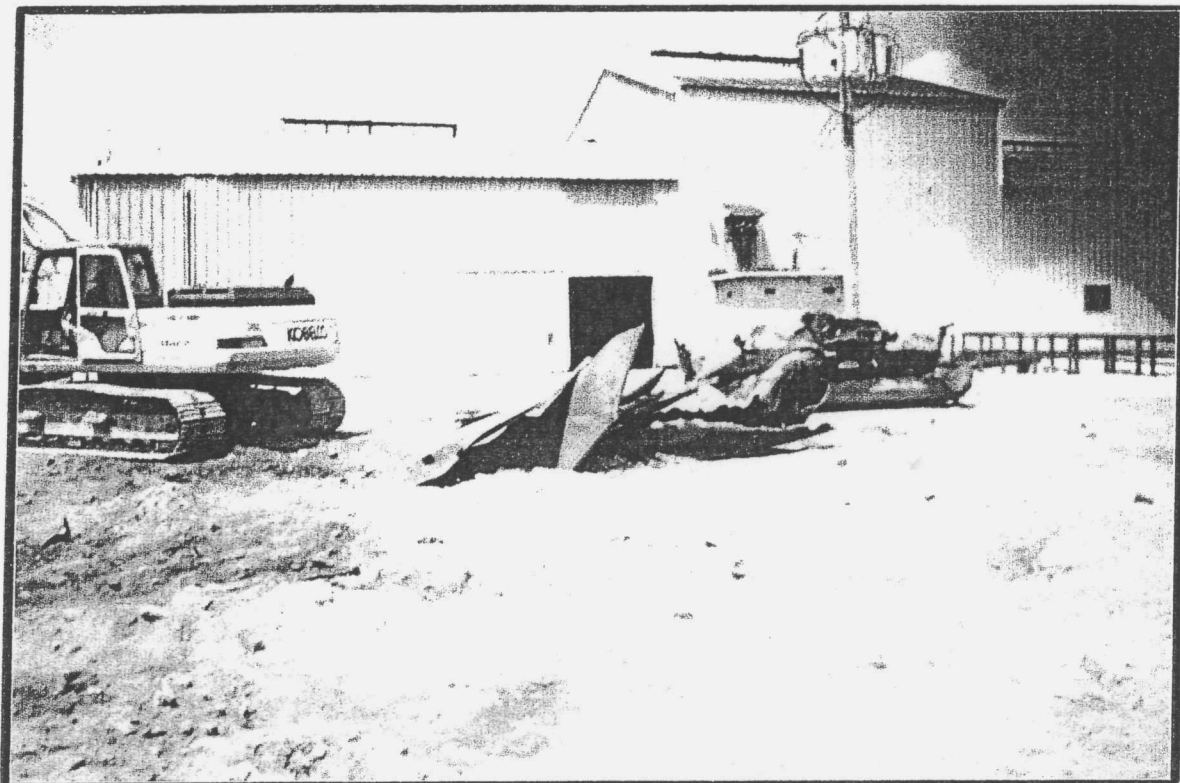
View of fuel oil tank #2.



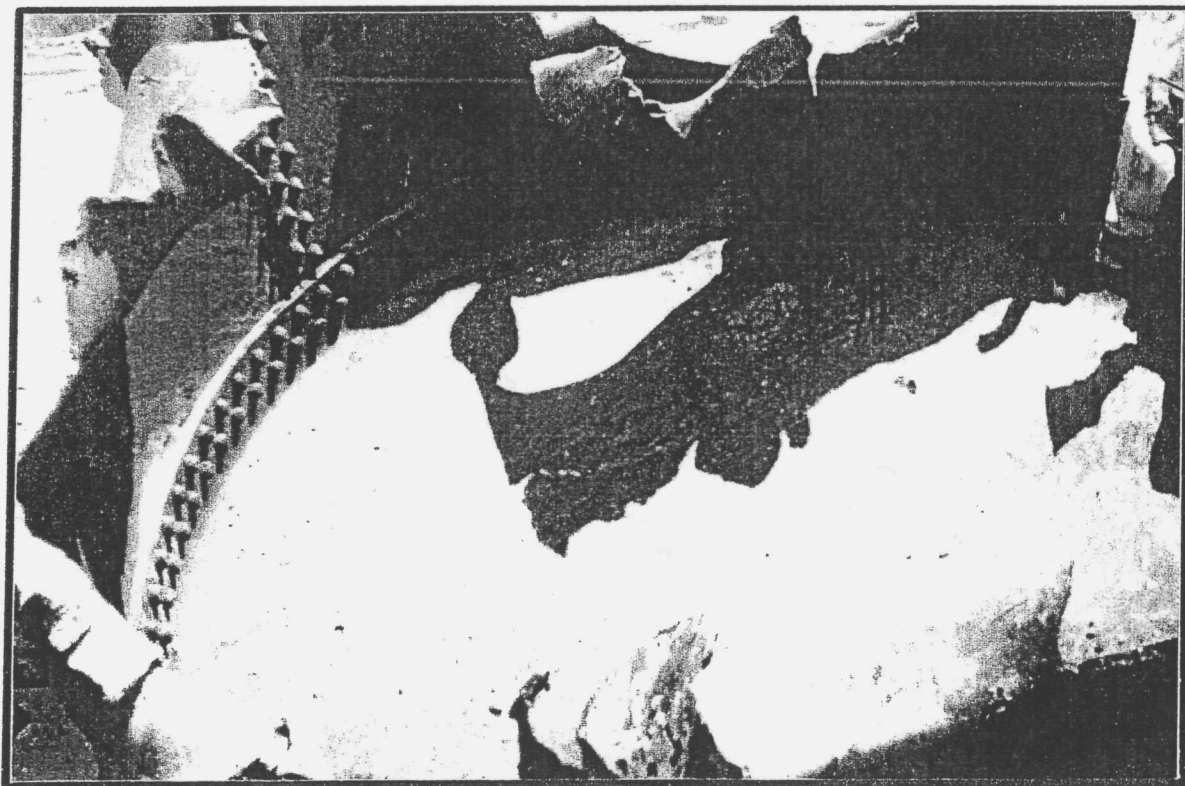
View of Kobelco trackhoe with shears used to cut up fuel oil tanks.



View of Takeuchi TL26 used to clean up zinc oxide waste and load trucks.



View of fuel oil tanks after being decontaminated and cut up for scrap.



View of decontaminated section of fuel oil tank.



View of excavated area where fuel oil tanks were located.



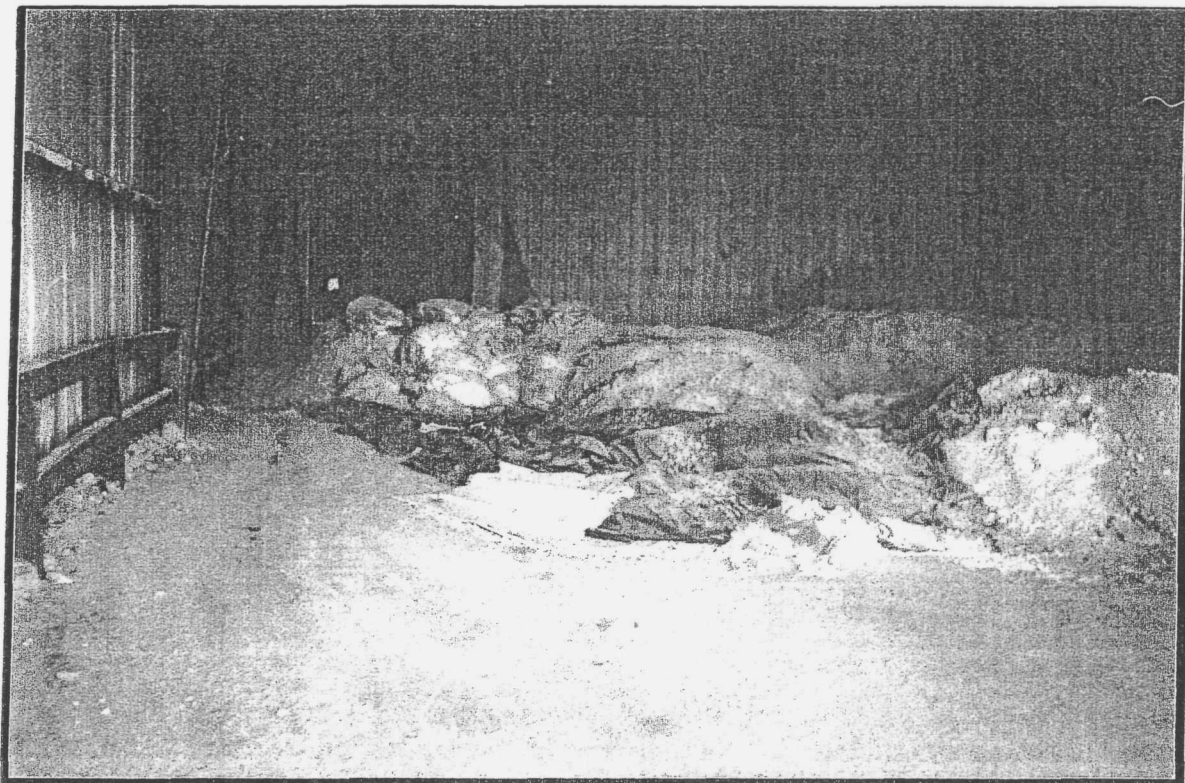
View of empty steel tank on site. Tank was decontaminated and removed for scrap.



View of fuel soils and bags of used PPE.



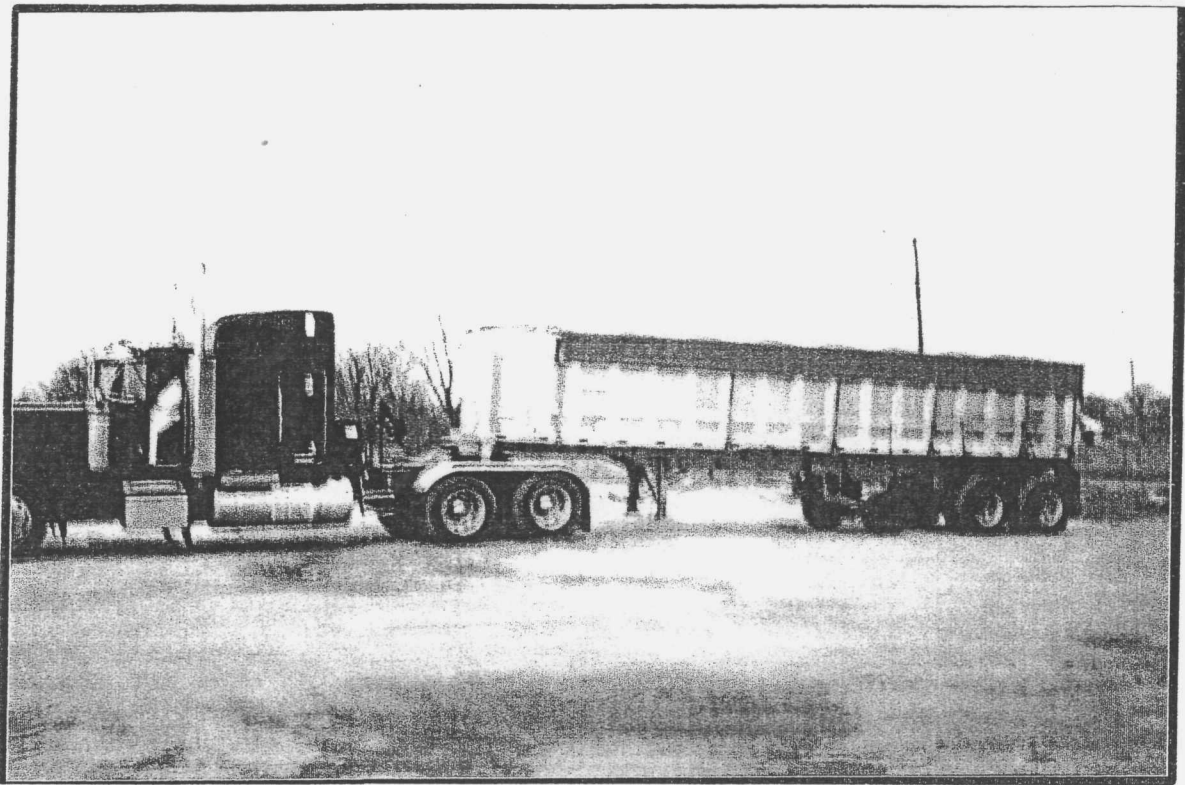
View of plastic containers stored in building #5.



View of zinc oxide waste and fuel soils from previous fuel spill.



View of fuel soils and zinc oxide waste placed in 12' x 12' grids.



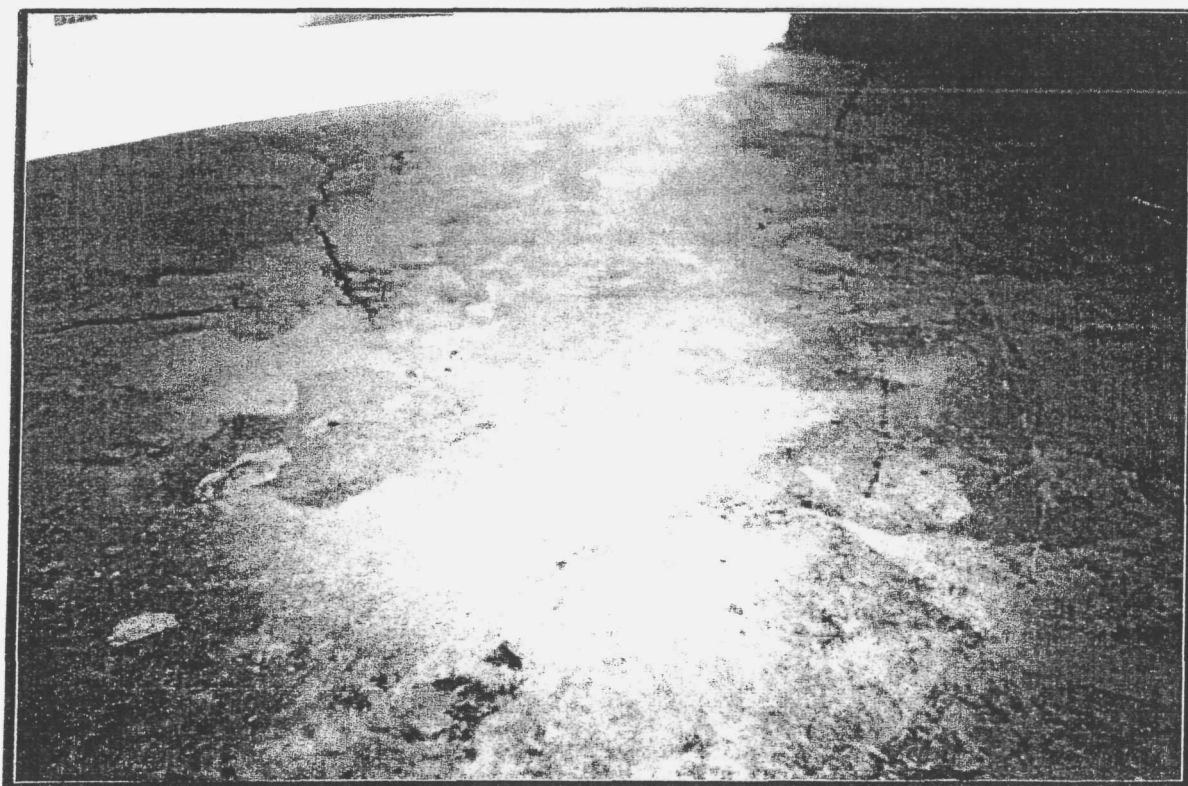
View of truck used to haul zinc oxide waste fuel soils.



View of truck being loaded with zinc oxide waste.



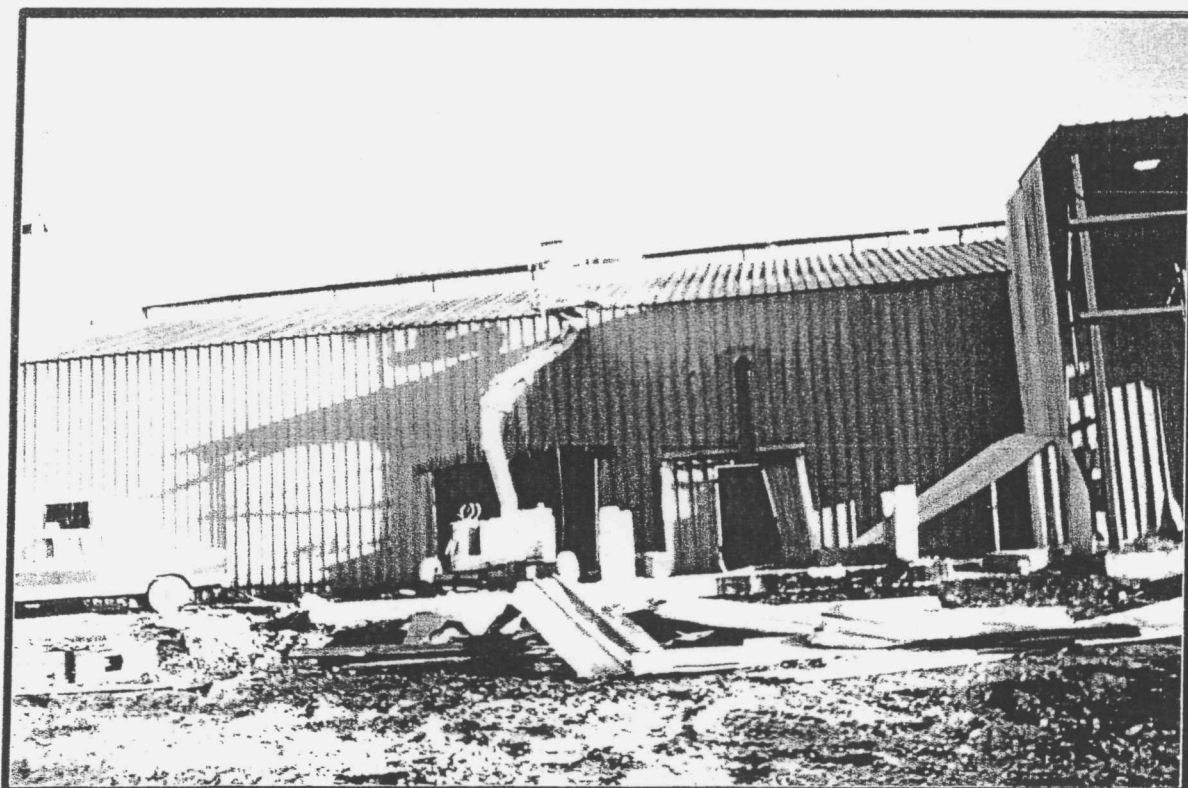
View of building floor before decontamination.



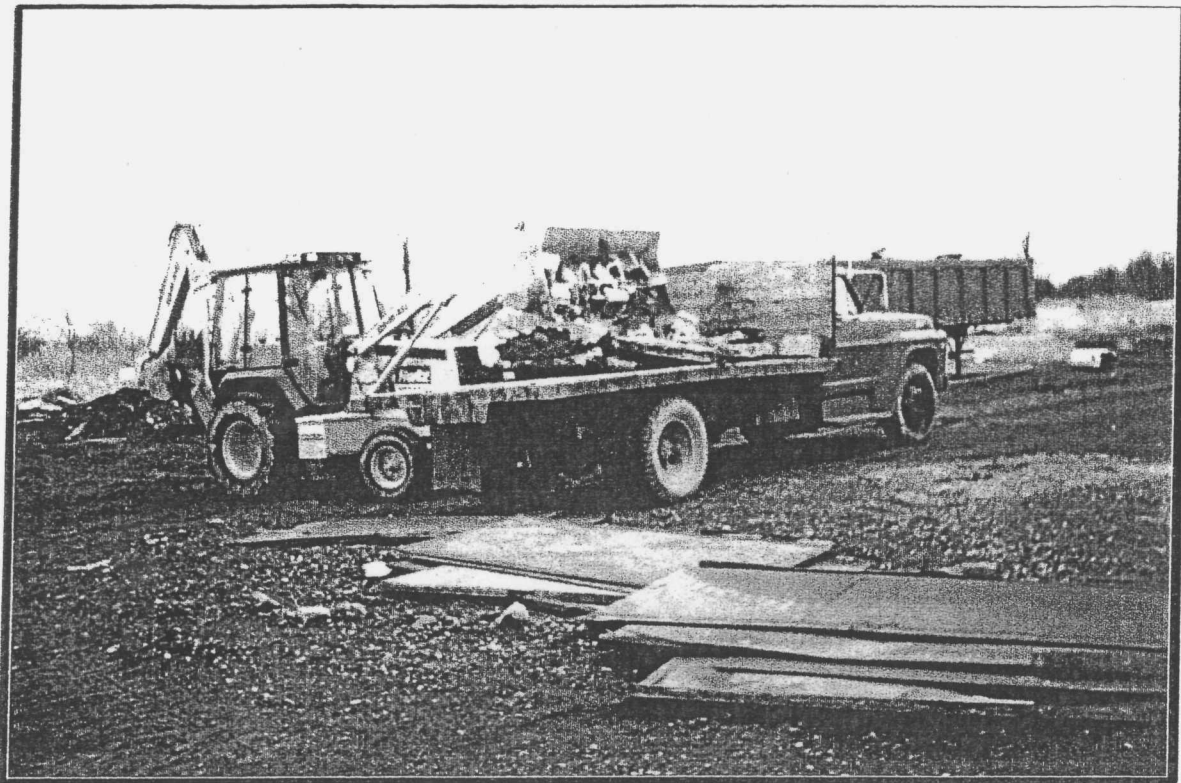
View of building floor after decontamination.



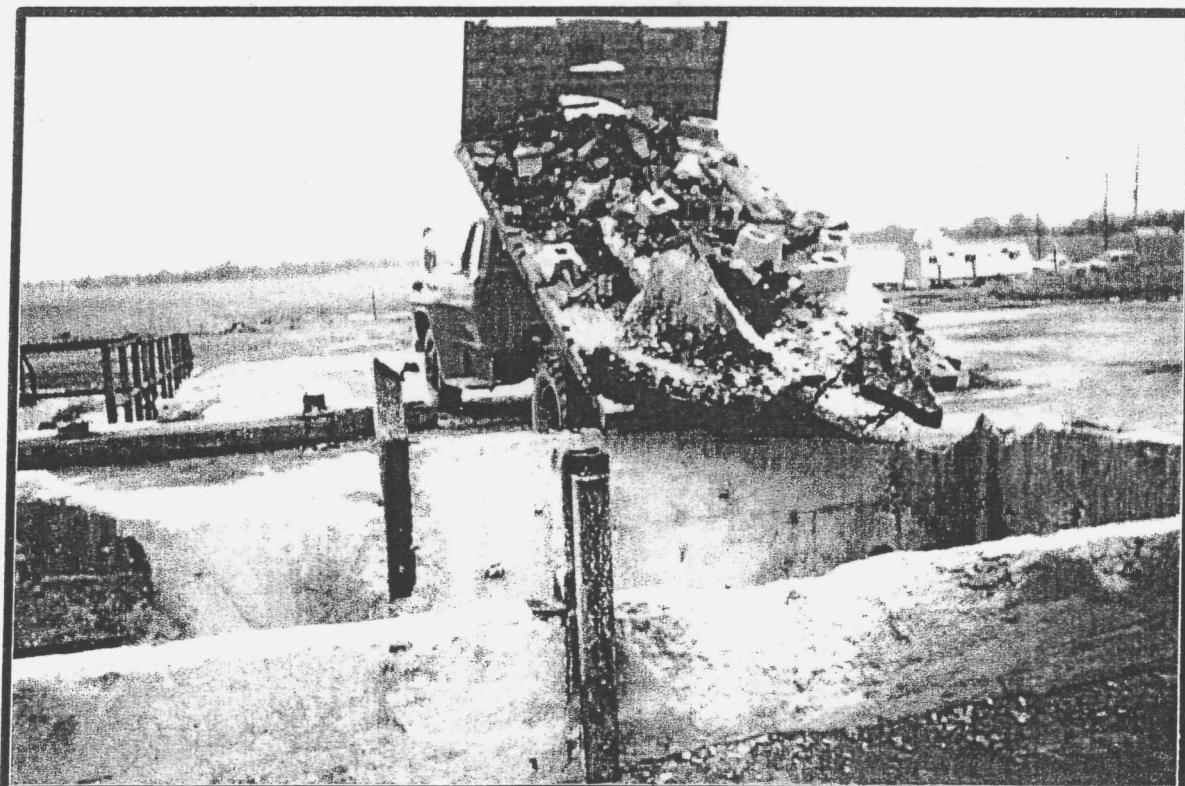
View of decontaminating inside of building.



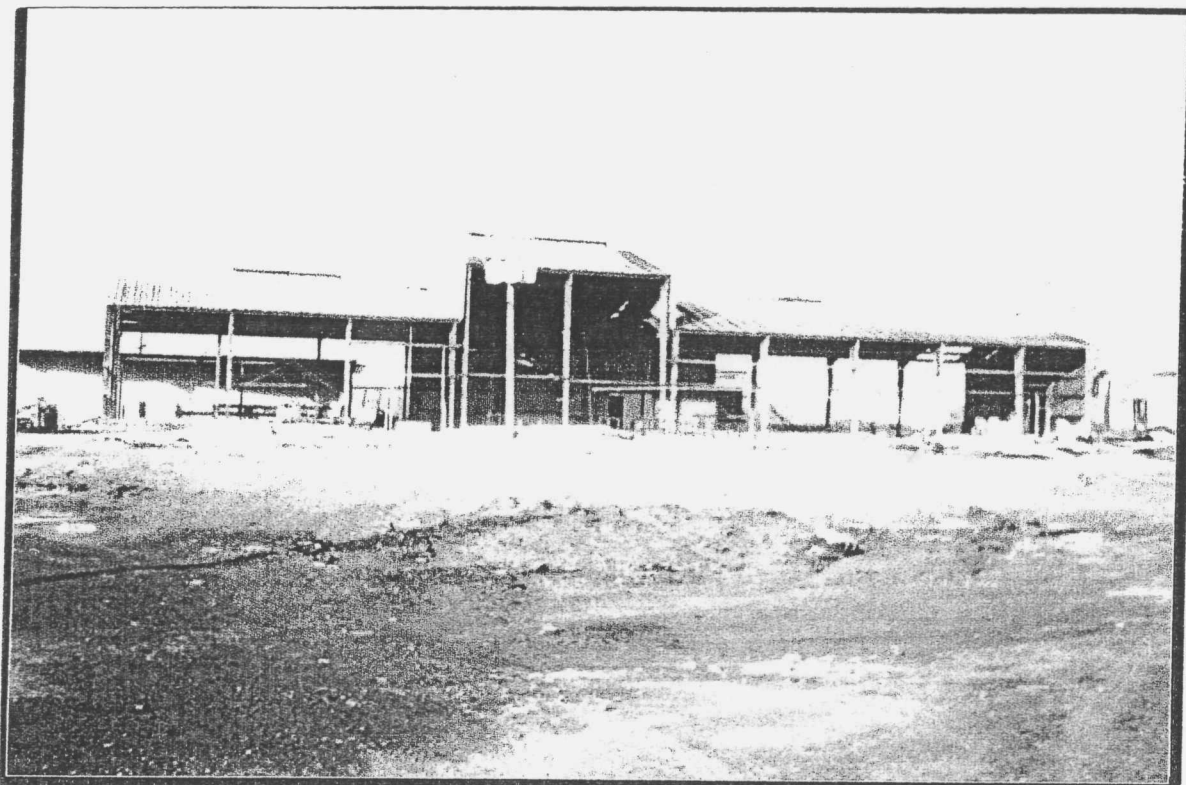
View of decontaminating outside of building.



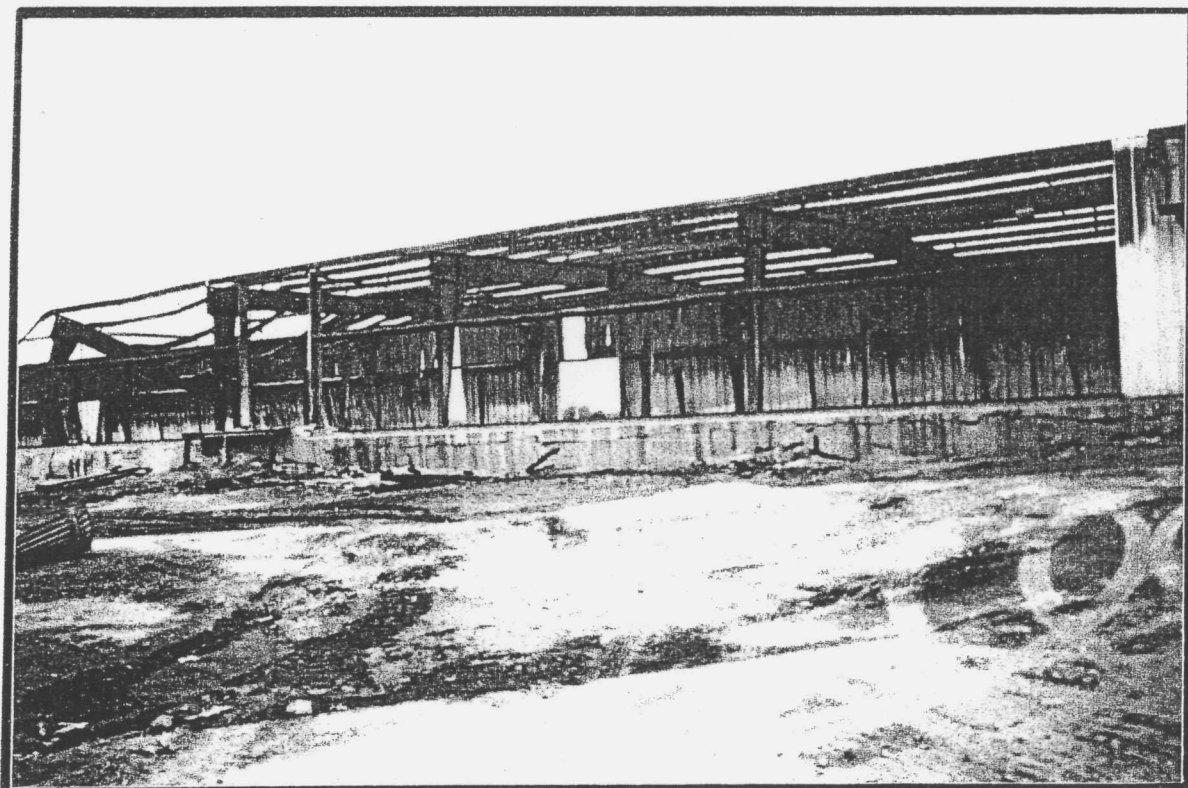
View of truck being loaded with concrete blocks and debris.



View of pit being filled in with concrete blocks and debris.



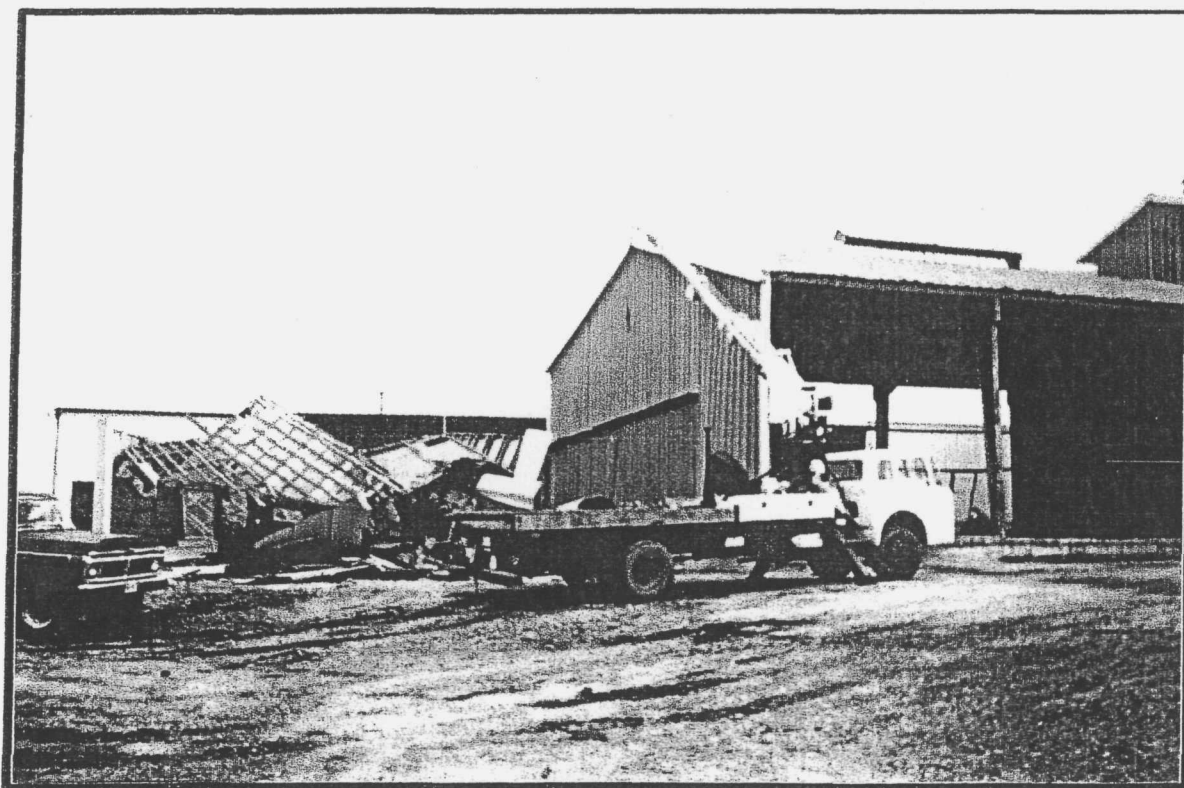
View of building #5 partially demolished.



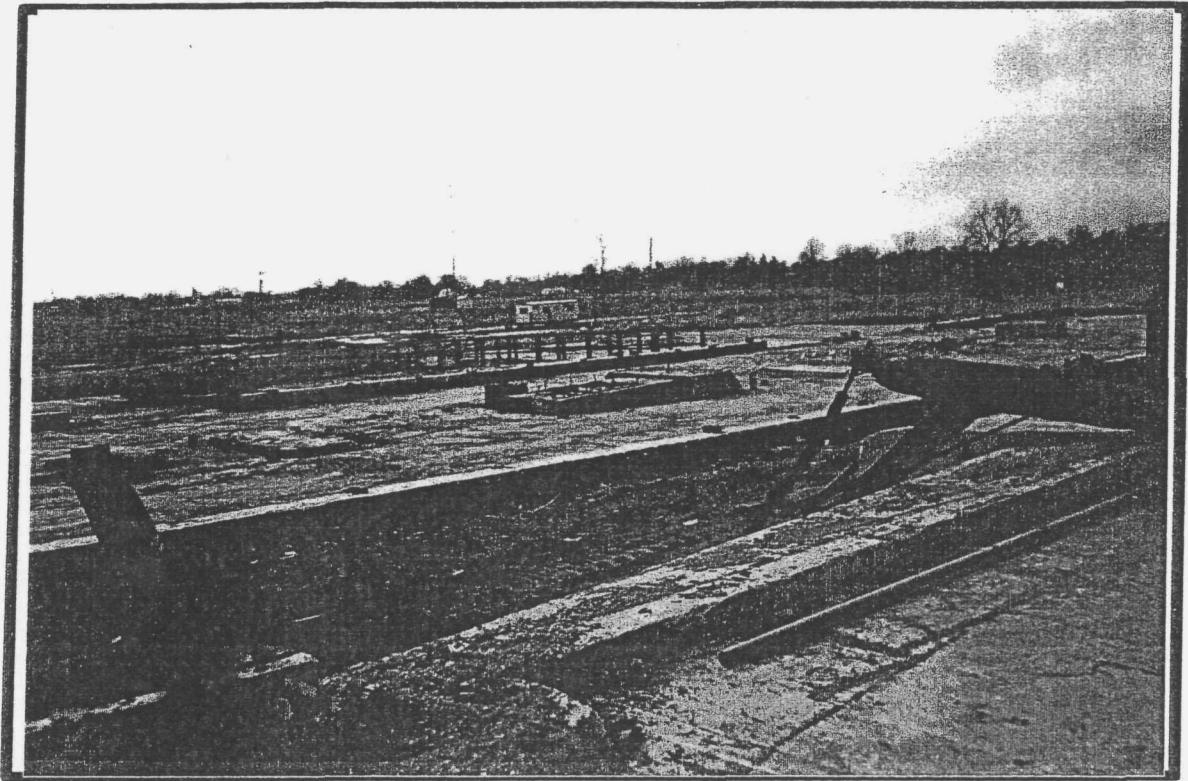
View of building #6 partially demolished.



View of Power Co. removing transformers and poles.



View of boom truck used to lower steel beams.



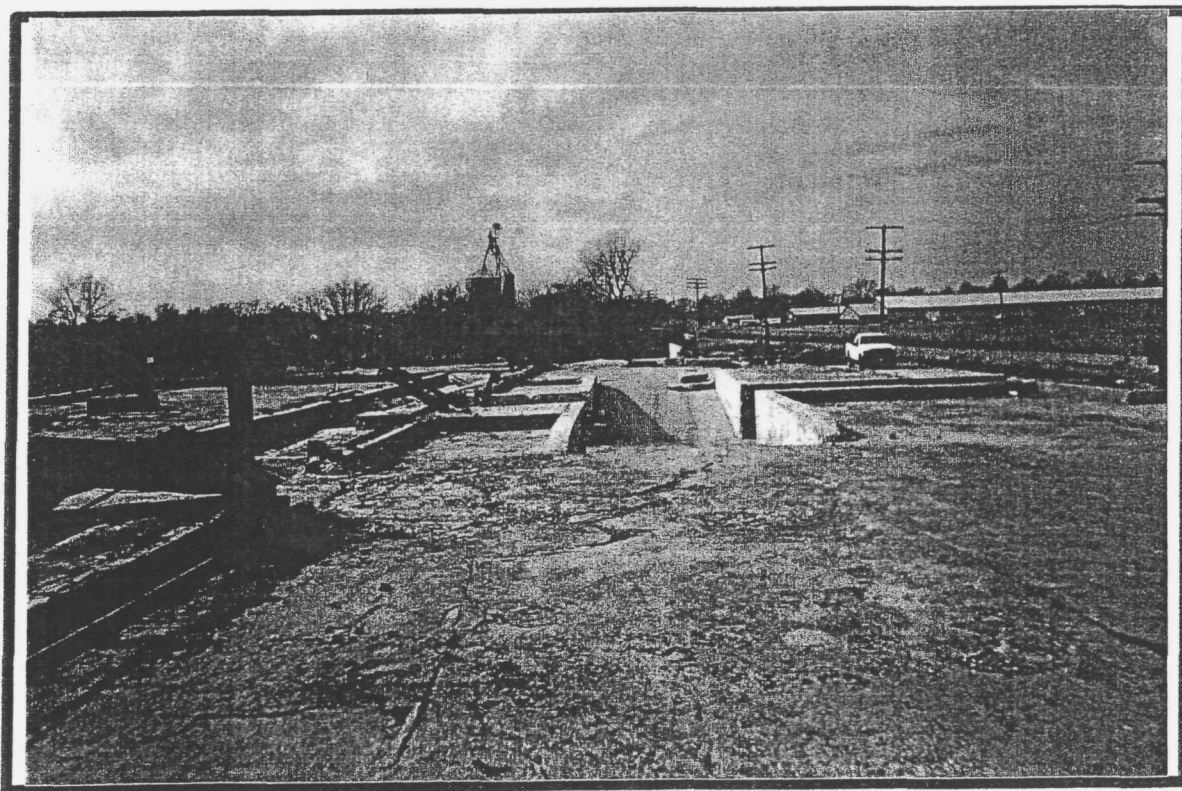
View of building #5 floor



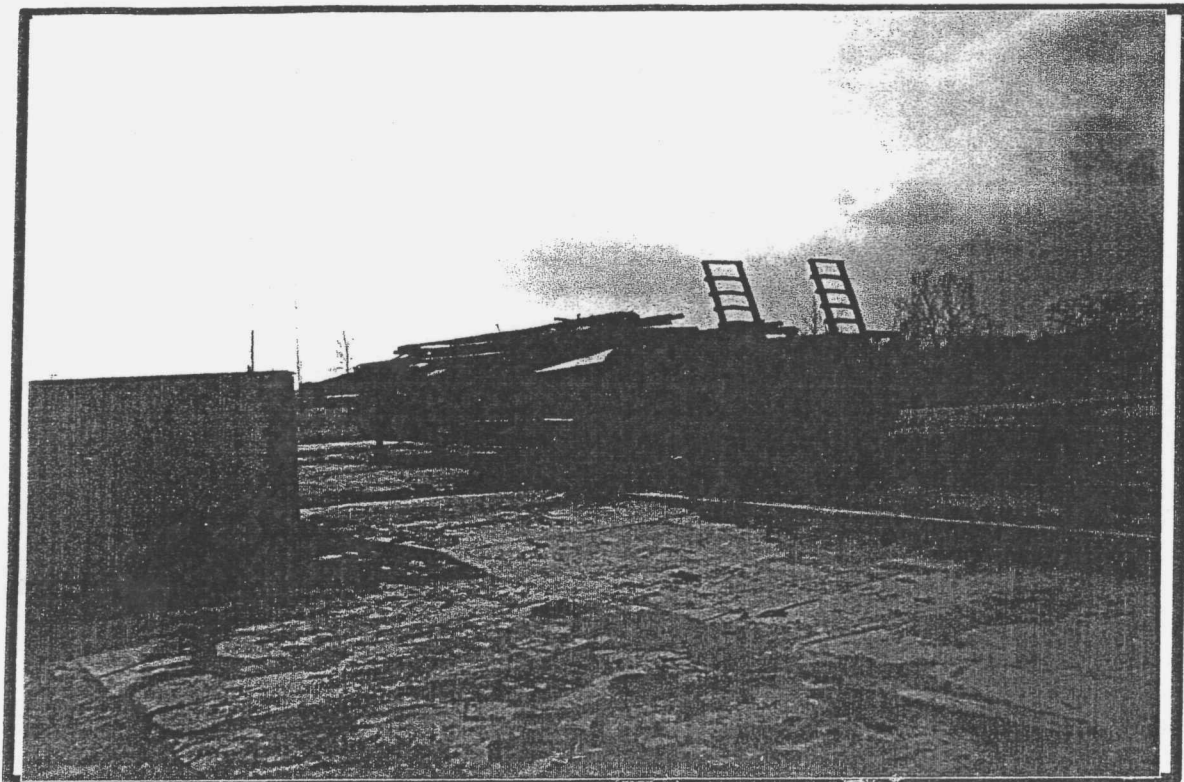
View of building #2 floor



View of east end of building #6 floor



View of west end of building #6 floor



View of trailer loaded with steel beams



View of demobilization of office trailer